DOCUMENT RESUME

ED 373 157 CE 066 950

AUTHOR	Cooper, Donna
TITLE	Learn at Home: A Philadelphia Distance Learning Project. Program Year 1992-1993. Final Report.
INSTITUTION	Philadelphia Mayor's Commission on Literacy, PA.
SPONS AGENCY	National Inst. for Literacy, Washington, DC.
PUB DATE	93
CONTRACT	X257A20167
NOTE	445p.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC18 Plus Postage.
DESCRIPTORS	Adult Basic Education; Adult Reading Programs; *Computer Assisted Instruction; Courseware; Demonstration Programs; *Distance Education; *English (Second Language); *Home Study; Inservice Teacher Education; Instructional Materials; *Literacy Education; *Partnerships in Education; Pilot Projects; Program Development; Program Effectiveness; Questionnaires; Records (Forms); School Business Relationship; Second Language Learning; Teaching Methods
IDENTIFIERS	*Pennsylvania (Philadelphia)

ABSTRACT

The Power Learning Project was a pilot test of the potential of home-based computer-assisted instruction (CAI) for adults with intermediate reading skills and adult nonnative speakers of English. Project development was made possible by a partnership involving public, private, and community-based organizations in Philadelphia. Online services were purchased from IMSATT Corporation, which sells access to the CYBIS integrated learning system (formerly known as Plato software). Each of eight test sites assigned one teacher to work with specially selected students who agreed to spend at least 6 hours weekly on computers placed in their homes. Teacher training and technology-related technical support services were provided by Drexel University's Office of Computing Services on a subcontract basis. A third-party evaluator confirmed that provision of CAI in the home was a likely factor in the achievement gains of some learners at certain test sites. It was recommended that the program be improved by providing more teacher training, better assessment/evaluation procedures, and higher-quality software. (Appendixes constituting approximately 75% of this document contain the following: postproject teacher interviews; project evaluation/data collection forms, correspondence, and agreements/contracts; teacher training materials; teacher logs; learner logs; electronic communications between participants; and examples of CYBIS usage data.) (MN)

Reproductions supplied by EDRS are the best that can be made from the original document.

ED 373 157

Final Report
Program Year 1992-1993
National Institute for Literacy Grant No. X257A20167

Learn at Home: A Philadelphia Distance Learning Project

U S DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it

☐ Minor changes have been made to improve reproduction quality

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

Donna Cooper
Executive Director
Mayor's Commission on Literacy

The activity which is the subject of this report was supported in part by the National Institute for Literacy. However, the opinions expressed herein do not necessarily reflect the position or policy of the National Institute for Literacy, and no official endorsement should be inferred.

CE 066 950

BEST COPY AVAILABLE

ACKNOWLEDGMENTS

The Mayor's Commission on Literacy would like to thank the learners and teachers who made this project possible. Their frustrations and achievements led to the development of an exciting new model for delivering adult education. Credit is especially due to Pedro Perez, John Houghton, Donna Rouse, Pat Haff, Scot Mentzer, Fred Lienhauser, Terry Martell, Meg Keeley, Rose Brandt, Teresa McCormick, Dr. Vuong Thuy, Le Quyen Vu, and Sam Keo who, as adult educators, made an extraordinary contribution to this effort. Jean Spriggs was invaluable to this endeavor by providing encouragement to learners and in gathering data from teachers.

This project was able to explore the far reaches of distance learning and advanced technology because Ben Burenstein and Terry Martell made an unparalleled commitment to help make this pilot a success. Without these two cyber-explorers we would not have been able to reach any of our goals. Mr. Burenstein also deserves special commendation for working as a true partner with the Commission in completing this final evaluation and report.

Miriam Heckshel of Control Data Corporation consistently overstepped her role by making more and more support available to this endeavor. Much of our progress consistently relied on her.

Nat Kannon, the President of IMSATT Corporation, brought the resources of his company and his own dedication to this project. He was a role model partner in this public/private effort; we wish that more business owners shared his commitment to service.

Jay Sivin Kachala is to be commended for his patience and flexibility in designing and implementing the impact evaluation in an extremely challenging environment.

We are of course grateful for the generous support and ongoing cooperation of Bell of Pennsylvania/Bell Atlantic, particularly Mary Kelly and Anne Greer. They persisted with us, working to find solutions to help adult learners reach their goals with the tools of advanced telecommunications.

Tremendous thanks are also due to the staff of the Mayor's Commission on Literacy who worked so hard and offered critically needed encouragement along the way.

Finally, we owe our deepest gratitude to Dr. Jan Biros of Drexel University's Office of Computing Services, whose vision and leadership moved this project off the drawing board.

We believe that the National Institute for Literacy exhibited the kind of leadership our field needs by supporting the Power Learning Project. On behalf of the participants in this project we thank the Institute!

Final Report

Program Year 1992-1993

National Institute for Literacy Grant No. X257A20167

Learn at Home: A Philadelphia Distance Learning Project

TABLE OF CONTENTS

Acknowledgme[illegible] 1

Section 1: Plan and Design of the Power Learning Project 2

- Introduction 3
- Research Questions 5
- The Model 7
- Developing The Partnership 9
- Mission, Goals, Objectives, and Design 11
  - The Goals 12
  - Objectives and Program Design 13
  - Target Population 14
  - Size of the Target Population 14
  - Participant Selection 15
  - Length of the Pilot 16
  - Provider Agency Requirements 17
  - Teacher requirements 17
  - Learner Requirements 18
  - On-going Communication 18
  - Tracking/testing Mechanisms 19
  - Teacher Training 19
  - Use of Funds 19
  - Learner Support 20
  - Division of Roles and Responsibilities 22
- Lessons of the Partnership 23
- Costs effectiveness of home-based learning CAI 26
- Family Learning 26

Section 2: The CYBIS On-Line Educational System
Hardware and Software....28
Hardware Purchase....29
Hardware Concerns....31
How Does the CYBIS System Work?....34
Options Available to Power Learning Project Participants....36
Description of the CYBIS System....38
Technical and Course-Related Concerns....40
Other Courseware Concerns....49
Why each group did not author its own curriculum....50
Integrating the Software with an Instructional Program....51
Learner's Use of Courseware....56
Section 3: Teacher Training and Support....63
Teacher training....64
Conclusions about Teacher Training....73
Section 4: Third-Party Impact Evaluation....76
Attachments....99
Attachment 1: Post-Project Teacher Interviews
Attachment 2: Forms
Attachment 3: Teacher Training Material
Attachment 4: Contracts
Attachment 5: Teacher Logs
Attachment 6: Learner Logs
Attachment 7: Electronic communications
Attachment 8: Examples of CYBIS Usage Data

SECTION 1:

PLAN AND DESIGN OF PHILADELPHIA'S POWER LEARNING PROJECT*

The Mayor's Commission on Literacy renamed this program the Power Learning Project based on feedback received from participating agencies to the original title

FINAL REPORT:

PHILADELPHIA'S POWER LEARNING PROJECT

INTRODUCTION

The Power Learning Project was designed as a pilot to test the potential of home-based computer assisted instruction coupled with classroom instruction for adults with intermediate reading skills or for those adults whose first language is not English. It was effectuated by the establishment of a partnership of public, private and community based organizations in Philadelphia. This project integrated telecommunications, an on-line integrated learning system and professional teachers to explore how this combination could help learners achieve their learning goals more quickly. Furthermore, the project's anticipated additional benefit was that participants would learn to command and comprehend contemporary uses of technology in a way that was relevant and beneficial to their personal lives. Through this project, teachers saw more rapid improvement in the skills of Power Learning Project learners than they observed in learners who did not have access to the on-line services in their home. Improvements were noted in basic reading, writing and comprehension skills as well as in the self esteem, confidence, and motivation of pilot participants. The rate of retention and time on task was increased. The pilot encountered numerous obstacles, yet the majority of all partners involved was that this project was extremely valuable and should be extended locally and replicated elsewhere. Two of the twelve adult educators involved with the pilot project felt at the end of the pilot that the project should not be replicated or expanded. The balance of the educators involved strongly recommend replication. Five of the educators are working with the Commission to raise funds to continue and upgrade the local pilot. Without ongoing funding in Philadelphia many of the literacy providers are unable to continue to implement the model. The Mayor's Commission and some of the agencies involved are actively seeking support to continue to use the courseware.

The Power Learning Project began in Philadelphia in November 1992 when the National Institute for Literacy provided $94,786 to match $150,000 in local support.

The impact evaluation for this project found that the provision of CAI in the home was a likely factor for achievement gains among some of the learners in certain test sites. The model as implemented in Philadelphia would have been improved by:

- a more reliable log-on system
- more time for teacher training
- better assessment/evaluation procedures
- higher quality hardware
- a dedicated phone line

These improvements would enable this viable and exciting model to continue.

RESEARCH QUESTIONS

This demonstration project asked questions about the computer hardware which was used, the connections between the microcomputers in people's homes and the IMSATT mainframe computer, the courseware offered by the CYBIS learning system, and the overall impact of the project. The specific questions were:

Hardware

- How do the participants respond to the hardware?
- What aspects of the hardware were most useful?
- Was the hardware sufficiently user-friendly aspects for the population?
- Which aspects of the hardware presented the most problems?
- What hardware could be recommended for future hardware for similar projects?

Connections

- What aspects of the mainframe hook-up presented problems, if any ?
- What effective measures were taken to resolve hardware or connection problems?

Software

- Which lessons were most used by the instructors and learners and why?
- Which lessons were least used by the instructors and learners and why?
- Was there a difference between lessons preferred by instructors and learners?
- How did the learners approach the lessons?
- Which aspects of the software package were most user-friendly?
- Were these user-friendly packages also effective lessons?

Software - continued

- Which aspects of the software package were least-user friendly?
- Were these less user-friendly packages also effective lessons?
- How did the programs help learners meet individual goals?

Impact

- Can reading skills gains be accelerated by adding home-based CAI?
- Can writing skills gains be accelerated by adding home-based CAI?
- Can math skills gains be accelerated by adding home-based CAI?
- Can self esteem be affected/increased by home-based CAI?
- Will learners change any attitudes toward technology after using home-based CAI?
- Can motivation to build literacy skills be increased by home-based CAI?

THE MODEL

In order to find the answers to these questions the Mayor's Commission on Literacy pursued the following approach:

- Six community based and two university based adult literacy providers were each given twelve computers, teacher training and access to an on-line curriculum by the Commission on Literacy;
- Agencies distributed the computers to specially selected adult learners who agreed to work at least six hours a week on the computers, once the computers were placed in their homes.
- Each of the eight test sites assigned one teacher to work with the students and to participate in all program implementation and evaluation meetings.
- Each agency designed their own method for integrating the home-based CAI into their classroom program.
- The Commission sub-contracted teacher training and technology-related technical support activities to Drexel University's Office of Computing Services.
- On-line services were purchased from IMSATT Corporation which sells access to the CYBIS integrated learning system (formerly known as the Plato software developed by Control Data Corporation).
- Bell of Pennsylvania provided in-kind technical support in matters relating to the telecommunication services.
- Control Data Corporation provided in-kind support including manuals and extensive technical assistance regarding the operation of the integrated learning system.
- Process evaluation tracking and interpretation activities were also sub-contracted to the Drexel University Office of Computing Services.

- Design and implementation of the impact evaluation were subcontracted to Interactive Educational Systems and Design (IESD).
- The Commission served as the facilitator among agencies and provided the field services necessary for data collection efforts.

DEVELOPING THE PARTNERSHIP

Philadelphia's efforts to launch this high technology distance learning project were realized through the formation of an effective partnership among public, private and community-based agencies. The partnership began when Drexel University's Office of Computing Services approached the Mayor's Commission on Literacy with the idea of working with IMSATT Corporation to try out their distance learning courseware. IMSATT had recently received the rights to sell the PLATO software developed by Control Data Corporation for remote use in homes and community-based education agencies.

Simultaneously, IMSATT Corporation was negotiating with Bell of Pennsylvania for the mass marketing of the CYBIS and other home education software products. As a result of IMSATT's efforts, a new collaboration was spawned, which included the Mayor's Commission on Literacy, Bell of Pennsylvania, Drexel University and IMSATT Corporation, to explore the possibility of a Philadelphia pilot of home-based, computer-based instruction for adult learners. The nature of the collaboration was deliberately undefined in order to allow for a creative and evolving implementation plan. Each partner brought its specific expertise to the design and implementation processes of the pilot project.

As the implementation options were reviewed, Drexel and the Commission decided that only those agencies with prior significant experience working with computers in adult education would be eligible for participation in the pilot. Three factors contributed to this decision:

1. A basic understanding of hardware and software features would reduce the initial teacher training associated with launching the pilot;
2. Experience integrating computers into learning would assure early understanding of and adherence to the vision;
3. Experience in working with both adult learners and computers indicated that the teachers and agencies could be expected to possess the skills, sensitivity and patience needed for such an integration.

While many adult literacy programs in Philadelphia have independent computers, few actually integrate usage into their curricula. Among the many agencies with computers, the Commission and Drexel invited seven adult education providers to a meeting to learn about the possibility of a pilot project. All seven agencies attended the first meeting and participated throughout the pilot. Those agencies included two ESL programs, two programs that serve women exclusively, two tutoring programs and two university based programs.

The factor which contributed most to the success of this pilot was that the partners shared a common purpose and a desire to work together.

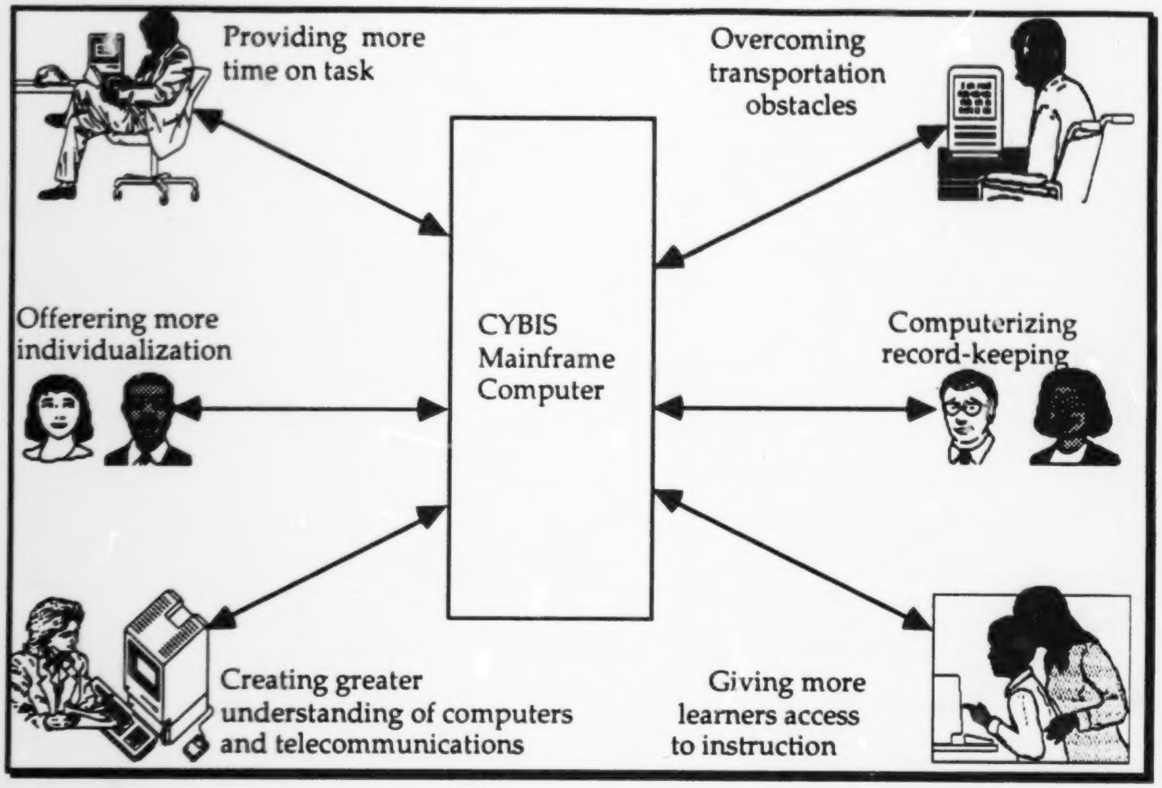
MISSION, GOALS, OBJECTIVES, AND DESIGN

The mission of this endeavor was to explore the potential of providing learners access to computer-based instruction from their home. MCOL pursued this mission for the following reasons:

- Philadelphia's many adult literacy programs are full and the extensive waiting lists of adults seeking access to programs keeps growing;
- Classroom-based programs most often offer less than six hours a week of instruction due to lack of sufficient funding;
- Adults reading at the fifth to eighth level, a majority of those served, often require two to three years of class in order to pass their GED exam or reach their personal goals;
- Adult learners enrolled in traditional classroom programs are able to build their reading and writing skills but remain ignorant about computers and telecommunications;
- The retention rate among Philadelphia's literacy providers tends to be between 50-75% of all learners enrolled; and
- Many adult learners have difficulty attending classes due to transportation or child care problems, or because of embarrassment.

With these factors in mind, the Commission decided that if home-based CAI could accelerate learning, it could have significant impact on the ability to deliver effective literacy services to more adult learners. Furthermore, learners would gain extensive hands-on experience with various uses of high technology. The Commission was also cognizant of the need to increase the technology-related skills of adult educators and to raise their awareness of CAI/integrated learning systems. Finally the Commission sought a simple solution to help learners overcome the childcare and transportation problems that inhibited them from attending class.

Illustration 1: Depiction of Attributes of Home-based CAI


Providing more time on task
Overcoming transportation obstacles
Offerering more individualization
CYBIS Mainframe Computer
Computerizing record-keeping
Creating greater understanding of computers and telecommunications
Giving more learners access to instruction

THE GOALS

In order to fulfill the mission of the project, it was imperative that the following goals be pursued:

1. Seek new ways to increase access to instruction
2. Seek techniques and technologies to accelerate the rate of learning
3. Provide basic literacy and computer literacy instruction simultaneously

Initial conversations among all agencies indicated that a consensus existed with respect to the current context and the goals needed to address the systemic problems.

In order to facilitate a thorough and thoughtful design process, the Commission and Drexel met on several occasions to develop alternative models for such a pilot. Both parties agreed that a successful model needed to achieve the following:

- Integrate the use of technology into existing adult literacy programs;
- Provide adult learners with greater access to high technology;
- Rely on modestly priced hardware and software for pilot and replication;
- Offer computer assisted instruction for basic skills enhancement through a variety of instructional approaches at no cost to adult learners;
- Expand the expertise of Drexel, the Commission, providers and teachers regarding the options for computers in the field of adult learning.

At the first general meeting with adult literacy providers, participants were briefed on the opportunity to participate in the design and implementation of a pilot project designed around specific courseware. The attributes of the courseware were presented by a sales representative of IMSATT Corporation. The providers asked questions pertaining to the flexibility, record keeping, hardware requirements and success of the system. At many planning meetings, the sales representative assured the providers that the system had all the attributes they requested.

In addition, the eight agencies worked together to design a pilot program to submit to the National Institute for Literacy for support. Prior to submitting the proposal, the Commission secured a local match of $150.000.

OBJECTIVES AND PROGRAM DESIGN

The Commission prepared the application to the National Institute for Literacy on behalf of the eight providers. However, the objectives and design of the project were collaboratively defined by all the participating agencies after the funding was confirmed. The following section details the program design decisions including:

target population
participant selection
size of sample
length of pilot
provider agency requirements
teachers' requirements

requirements of learners
tracking and testing mechanisms
teacher training
use of funds
learner support
roles and responsibilities

These decisions were made collaboratively by the staff of the eight provider agencies, the Commission and Drexel University's Office of Computing Services.

Target Population

Because the pilot would test the feasibility and impact of home-based computer assisted instruction, participants would be selected from among those adult learners who had a minimum of a fifth grade reading level based on the teacher's estimation. This would ensure that the learner's skills were high enough to read the basic skills courseware and follow the directions. IMSATT indicated that a learner with a third grade reading level could operate and benefit from the system. However, the participating teachers' review concluded that a minimum of a fifth grade level, (intermediate level), would be needed to navigate through and learn from the system. CYBIS has lessons geared for earlier learners, but coupled with the fact that the computers would be in homes, not in a lab with an instructor, the teachers felt lower-level learners might become confused or overwhelmed. A ceiling of an eighth reading level was established to enable the pilot to test the impact of the system on intermediate learners.

Demographic characteristics beyond reading level were not defined. Nevertheless, 90% of the participants would be public assistance recipients, unemployed or underemployed individuals or those on fixed incomes simply because that is the profile of who receives services from these eight agencies. Two of the programs offer ESL instruction exclusively. Two other programs direct their services to women, therefore the overwhelming proportion of the participants would be females, many of whom were single heads of households. Because of the disadvantaged economic and educational circumstances of the learners who typically seek the services from these eight providers, it was anticipated that 90% of the participants would not have any substantial experience using computers.

Size of the Target Population

While there was great enthusiasm to undertake this effort, the providers felt that a small number of participants from each agency would make the pilot more manageable. The steep learning curve associated with learning to use advanced technology was seen as the greatest obstacle. With a smaller sized pilot it was felt the teachers would be able to ensure their own learning while still delivering quality instructional and support services for the adult learners. The other factor limiting the pilot size was money. Each participant needed to have a computer and a modem. .

Participant Selection

In addition to defining the target population, the providers had to decide a common means of selecting participants. Random assignment to the pilot was discussed to help ensure the statistical validity of the outcome. However, each provider placed a higher value on student choice and was reluctant to assign a learner who did not want to participate. Furthermore, the programs felt that random assignment often leaves those who are not selected with a sense that they were misled or cheated. The possibility of choosing a random sample from among those who were interested in being involved was also discussed. However, the providers felt that they could not assure learners who were not selected a chance to participate at a later date. Providers did not want to raise learners hopes without any certainty that they would ever have access to the technology. Providers felt that any one of these negative scenarios would undermine the overall credibility of their program. Since computers were going to be loaned to the learners, the providers wanted to be sure that every participant in the program would reliably care for and return the computer at the end of the pilot. In fact the selection of participants was done in three ways:

Self selection - teachers discussed the projects or put up announcements. From among those who expressed interest twelve participants were selected. The teacher screened-out those who did not fall within the specified reading level, those who could not be trusted to return the equipment, or those whose attendance or work habits indicated a lack of focus on achieving their learning goals.

Teacher identified - teachers recruited specific individuals for participation in the program based on reading level, student performance and regular attendance.

Class identified - programs designated one full class of intermediate level learners to participate in the pilot.

The participating agencies encountered no difficulty recruiting participants for the pilot. Most programs had more individuals interested than they were able to include, a testimony to the allure of having a computer at home.

Length of the Pilot

The pilot was to last one year. The group felt that providing learners with access to the on-line system for six months would produce sufficient data for the pilot. The time-frame was as follows:

Oct. - Nov.	Start-up period, teacher training
Dec.	On-site learner training, computer distribution
Jan. - July	Learners on-line
Aug. - Sept.	Compilation of data, preparation of the final report

Unforeseen, yet very common, obstacles stood in the way of meeting the goals of this time line:

1. Contract negotiations between IMSATT and the City of Philadelphia were quite lengthy;
2. Logon protocols needed to be developed and re-written on several occasions;
3. The purchase of the computers was delayed by a market shortage of the desired equipment;
4. The assessments took longer to administer than anticipated;
5. Winter holidays interrupted the computer distribution process; and
6. Programs' academic year ended before a full six months of on-line instruction.

Also, less common difficulties impeded certain learners from beginning their instruction, while others did not encounter these problems:

1. Some learners' homes had antiquated or unusual telephone wiring, which inhibited their access to the on-line services;
2. Distribution of computers to the learners homes was quite complicated since most of the learners and teachers did not have cars;

3. Ten computers were MS-DOS based machines and required a different log-on protocol from the other 98, which were Apple/Macintosh computers;
4. Bell Atlantic changed the planned log-on protocols on the very week that the computers were distributed.

As a result of these obstacles, learners did not begin to use the system until the beginning of January (December was the expected learner start-up month). The delayed start-up date, combined with the fact that several of the adult education providers do not offer classes past mid-June, afforded the majority of the learners only four months on the system.

Provider Agency Requirements

In addition to full participation in the planning of the pilot, each provider agreed to the following expectations:

1. Identify one teacher who would be primarily responsible for the implementation of the pilot project from the first stage of teacher training to the final phase of the evaluation;
2. Attend monthly meetings to share progress and learn about system updates;
3. Provide all necessary pre/post testing data, complete teacher logs, and help learners file for welfare payments to cover the monthly subscription costs for the on-line services;
4. Implement motivational activities to encourage learners to utilize the on-line services at least six hours a week for the full six months;
5. Provide classroom instruction which could be complemented by the lessons on the computer-assisted program
6. Collect the computers at the end of the pilot program for use as they wished within their agencies.

Teacher requirements

Program administrators agreed that the designated teacher would be released from their regular responsibilities to attend the training sessions at Drexel University. In addition, the teachers were expected to allot class time as needed to discuss the on-line operations and problems. Teachers were expected to complete logs outlining their own progress with the system, methods for integrating the computer lessons with their classroom materials and notes about learner progress reactions. In addition, each teacher volunteered to be on-line one evening a week or a Sunday morning to answer the queries of learners who were on the system (See Attachment #2, Instructors On-Call Schedule).

Learner Requirements

While learners did not participate in the planning process, the providers developed a limited set of expectations with which each potential participant needed to agree (See Attach. 2, CFL Learner Agreement). These expectations included:

1. Taking care of the computer and agreeing to return the computer at the end of six months;
2. Logging-on to the system for at least six hours a week;
3. Experimenting with the on-line means of communication;
4. Completing all pre/post testing;
5. Keeping learner logs of how they felt and what they learned;
6. Attending two project-wide meetings with the Commission.

On-going Communication

In order to assure the greatest level of cohesion among the eight programs and to provide support for the teachers, monthly meetings were established. The monthly meetings were expected to be two to three hours in length. In addition to meetings, the teachers communicated regularly by telephone and through the E-mail and electronic bulletin boards. All electronic mail comments have been codified by courseware comments, system comments or general comments. These comments are attached as they are quite instructive -- they indicate the growing level of sophistication among all parties involved and the extraordinary level of teacher frustration caused by the technological weakness of the model. Despite the exasperation that is expressed, the teachers persevered providing the inspiration and capability needed for implementing the pilot project.

Tracking/testing Mechanisms

Each of the participating agencies agreed that both traditional and non-formal assessment instruments needed to be employed to fully capture the impact of the pilot. Reaching agreement on the testing methods caused the most conflict among the providers and between the providers and the Commission. Initially all parties, including the Commission, expected to rely on the computer-based testing instruments which are an integral part of the CYBIS software to gauge the impact of the model on learners. However, the computer based instruments were reviewed and all parties determined that they would not capture the impact of the integration of the computers with classroom instruction. Thus, there was an agreement that a recognized standardized test, a standardized self esteem assessment and learner/teacher journals would be used to gauge progress. The two standardized instruments would be given to the learners in a pre and posting testing fashion. The two ESL programs expressed reluctance to use these instruments. However, they did not suggest any other instruments and said that they would be willing to try the agreed upon protocol.

Teacher Training

More extensive teacher training and support were required than anticipated when the project was envisioned. The planning meetings became increasingly focused on teacher training methods and processes which are described in Section Three of this report in great detail. Drexel University and Control Data Corporation took the lead in designing and implementing the teacher training.

Use of Funds

The Commission provided a grant of $7,000 to each provider to help offset the costs of teacher and administrator time to implement the project. Agencies were free to use the funds as they wished as long as the expenditures were directly related to the project. Each provider submitted a projected budget to the Commission to outline their expenditure plan. In addition, the Commission contracted with Drexel University for teacher training and on-going technical support services. A contract was awarded to IESD for third party assessment and evaluation services. The balance of the funds were used to purchase computers, modems, on-line fees and to cover the Commission's monitoring and administrative costs. All parties were apprised of the use of funds.

To offset 50% of the on-line fees incurred directly by the Commission ($20 a month per learner), the Department of Public Welfare (DPW) agreed to reimburse the Commission for these expenses for pilot participants who were public assistance recipients. These funds were made available from DPW's "Books and Tools" allowance which provides up to $500 per year per recipient. Each agency agreed that they would either help their learners apply for these funds or reimburse the Commission for this portion of on-line costs.

Learner Support

The agencies agreed that the success of the pilot rested on strong learner support activities. It was envisioned that early support activities would be critical to helping learners overcome frustration with learning to operate and navigate the on-line system, especially since 90% of the learners had no previous computer experience.

In addition to allotting class time to discuss computer problems and progress, the teachers were expected to be in contact with learners via the E-mail systems to offer encouragement and support. Programs were encouraged to offer certificates and mementos of progress to learners who worked on the system at least six hours a week, or who showed significant progress. Some programs were unwilling to insert such incentives as it was not consistent with their philosophy or because it would cause problems for those who were not given access to the pilot but attended classes at the agency. Nevertheless, each agency agreed to explore creative ways to motivate and encourage learners to use the on-line system.

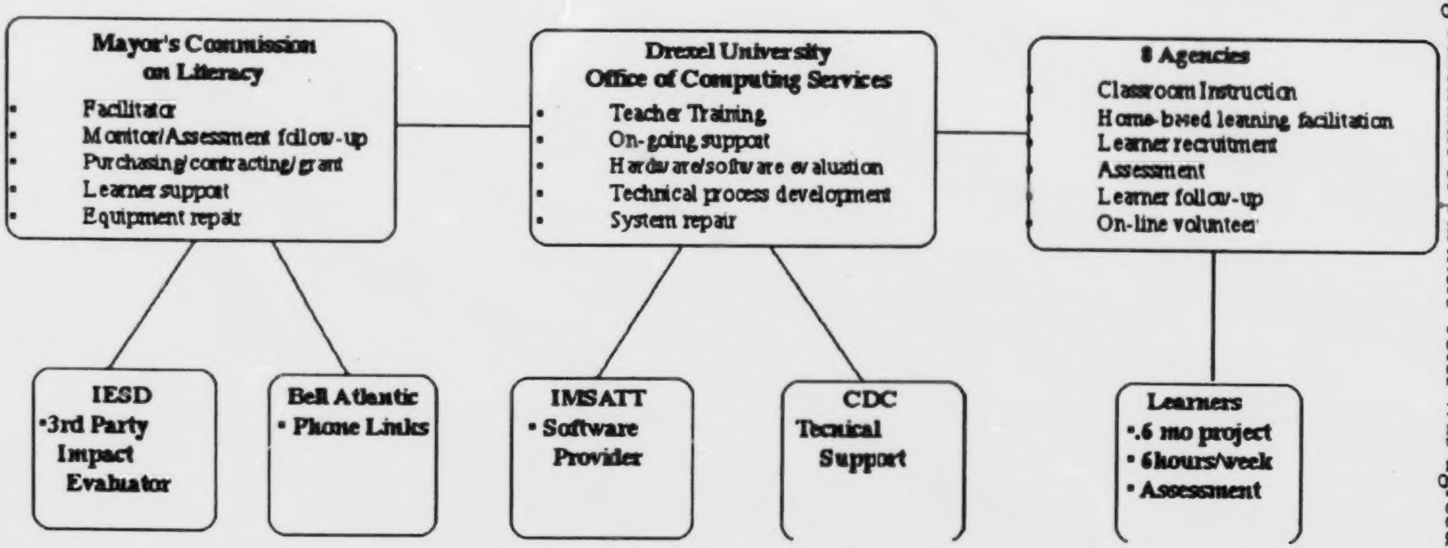
Teaching learners to utilize the on-line communications systems was another aspect of learner support. The teachers felt that once learners could communicate with one another and with their teacher, they would increase their system usage. Thus, the teachers planned to instruct the learners to use the on-line communication structures after learners had command of the basic system operation principles. It was anticipated that the learners would be ready for this level of sophistication in their third month on the system.

The Commission also arranged for city-wide pilot meetings to help build a sense of peer support beyond individual programs.

To help ensure that the computers were returned to the agencies after the six months, the Commission agreed to offer the learners a certificate and letter of recommendation which indicated the learner's progress in the program and reliability.

Division of Roles and Responsibilities

The following schematic of partners' roles was agreed to by all parties:


Mayor's Commission on Literacy
• Facilitator
• Monitor/Assessment follow-up
• Purchasing/contracting/grant
• Learner support
• Equipment repair
Drexel University Office of Computing Services
• Teacher Training
• On-going support
• Hardware/software evaluation
• Technical process development
• System repair
8 Agencies
• Classroom Instruction
• Home-based learning facilitation
• Learner recruitment
• Assessment
• Learner follow-up
• On-line volunteer
IESD
•3rd Party Impact Evaluator
Bell Atlantic
• Phone Links
IMSATT
• Software Provider
CDC
Tecnical Support
Learners
•.6 mo project
• 6hours/week
• Assessment

LESSONS OF THE PARTNERSHIP

In retrospect, it was apparent to all parties that the collective inexperience with advanced technology of the literacy providers hindered the capacity to make the best possible decisions. Many critical questions which needed to be asked in the early planning stages of the project were not even pondered. The most deleterious effect was manifested by naive expectations of the software program. In addition, some hardware concerns, while more simplistic, were also not considered until the pilot was well underway.

A hands-on demonstration of the software program was not requested until far into the planning process. A sales representative from IMSATT, present at many of the planning meetings, provided assurances that the system would meet the diverse instructional and record-keeping needs. On one occasion, he provided a demonstration of some of the lessons and parts of the record-keeping system. However, a hands-on session was not offered. The providers were specifically told that the system provided for individualized instruction which could be learner-directed, and that whole language as well as more routine instructioned approaches were available. In addition, the system was purported to offer extensive record keeping capabilities to track each learner's progress in each module of instruction. The providers stressed the need for teachers and learners to design their own instructional programs without pre and post test sequences. IMSATT assured the providers that the system had a high degree of flexibility. Specifically, the providers understood that they would be able to assign individual lessons to individual learners simply. They also were under the impression that writing and sending messages could be done easily. While the system does have these capabilities, they could neither be done simply or reliably.

Drexel University offered technical expertise throughout the planning process. Their experience in purchasing and designing software packages and instructional programs which integrate technology was invaluable. Nevertheless, our project was undermined by the misleading software information received during the process, and by the naiveté of the providers. When finally given the opportunity to work on the system, the providers learned that many of the attributes that were highly valued by the adult educators were in fact not available or not as flexible as we required.

While the provider agencies were dismayed by the limits of the software, they remained excited about the capabilities that did exist and the opportunity to provide learners with on-line access to instruction from their homes. The absence of the creative virtues that were expected in the system required a more traditional approach to instruction. The teachers, however, remained optimistic that the learners would benefit and that they would collectively learn a great deal by moving forward with the fundamental design of the project. It is also worthwhile to note that the overzealous salesperson was not representative of the staff of IMSATT, which throughout the implementation process were very realistic and helpful.

In fact, although the project may have been implemented more effectively if the software package had been able to meet the expectations presented by IMSATT, the partners' critical learning process would have been less fruitful had the process gone extremely smoothly. The Commission, Drexel and each of the providers gained invaluable expertise in evaluating software and working with software and hardware suppliers as a result of the obstacles which had to be resolved throughout the early stages of implementation.

Consensus Among Parties

While the Power Learning Project was able to achieve all of its stated objectives, the one key administrative/management finding which inhibited the fullest possible impact of the model was the conflicting goals of the many agencies involved in the pilot. Although each of the partners agreed with all aspects of the program design, unstated goals which were particular to individual agencies had a significant impact on the participants.

For instance, all of the provider agencies agreed that their teachers would fully integrate the computers into the instructional program. Yet, five of the eight programs implemented the home-based learning as an add-on rather than an integral component. In these instances the goals associated with larger grants or programs took precedence and the computers were simply an addition to existing classes.

The two university-based programs which participated failed to have the administrative commitment needed for adequate oversight or to support the teacher involved. As a result, both university-based programs experienced teacher turn-over in the middle of the pilot. As the administrator of the project, the Commission noted a correlation between the overall size of the participating agency and the degree to which the project was administered according to the model -- the larger the institution, the less likely the pilot goals were achieved. This may have been caused by the fact that large institutions are managing programs with numerous grants and the funding associated with this project was too small to warrant their attention.

The two ESL programs were quite active, and made sure their learners were on-line and used the courseware. However, they provided none of the data necessary for the impact evaluation. Further, both agencies admitted learners who were below the agreed upon 5th grade level, thus, decreased the sample size of the pilot. While they ascribed to the principles of the model, they did not share a strong commitment to measure the impact of this pilot for the benefit of determining the potential for replication.

Two volunteer tutoring organizations participated in PLP. While their teachers were active in the planning, they significantly diverted from agreed upon objectives upon implementation. Both agencies admitted learners who read below the fifth grade level and one of the agencies did not offer classes or sufficiently carry-out data collection efforts.

While all of the providers understood the premise and the specifics of the model, their own organizational goals, including receiving twelve computers and modems and $7,000, outweighed their commitment to the needs of the pilot.

The software company provided a great deal of support to this project. However, due to their own goals for capitalization and financing, the price of the service was relatively high and was not consistent with the state of the software package. Log-on problems, integral to the software's home delivery, constantly interrupted service, and numerous aspects of the software were inaccurate or improperly routed Nevertheless, the PLP received no relief from the cost of the software. More importantly, the underdeveloped state of the software inhibited the learners' ability to use it to its fullest, thus undermining the potential impact of the model.

A key accomplishment of the pilot, was the degree to which advanced technology expertise was disseminated among many providers in Philadelphia. However, the high number of providers involved also diminished the Commission's ability to control the pilot to a sufficient degree to clearly determine the impact of the model.

COSTS EFFECTIVENESS OF HOME-BASED LEARNING CAI

In comparison to traditional models of delivering adult literacy instruction, the Power Learning Project was an expensive undertaking. On a per learner basis, $2,440 was expended. However, if the evaluation and teacher training costs are taken out of the calculation, the cost drops to $1,620 per learner. This is still a hefty sum relative to commonly-held per learner costs.

The marginal cost per learner in a replication project, however, drops to $1,000 per learner if the cost of the hardware is amortized over four years (four years represents the useful life of the equipment).

Costs can be lowered by decreasing the costs associated with the local phone link to the on-line system. Local phone companies, large companies who are on fiber-optic networks or other carriers such as cable companies may be able to provide funds or an in-kind service to exempt the adult literacy providers from these costs.

Based on the experience of the adult educators in the Power Learning Project, the $1,000 expenditure increased the rate of learning of those learners who used the system enough to warrant the additional expenditure. They forsaw the possibility that many learners could reach their learning goals more quickly through home-based CAI, thus exiting programs at a faster pace and making room for new learners.

FAMILY LEARNING -- AN UNEXPECTED OUTCOME

Although the PLP model was not intended to serve individuals outside of the target audience, in every single group teachers noted that family members and neighbors used the computer. Many of the learners who were single parents told their teachers and project administrators that they worked together on the computer lessons with their young children. In the early stages of the project these parents said their children helped them use the computer and work on math or reading skills. As the project progressed and the parents' skill level increased the roles reversed and parents began to provide the lead in the home instruction. Although this was not an intended consequence, the degree to which this occurred may point to valuable areas of exploration in replication efforts.

The placement of the computers in the homes of adult learners also resulted in the assignment of a new social role in their community. Many learners invited neighbors and extended family members to their homes to work on the computers. Some learners had a schedule by their computer detailing when each neighbor could work on the computer. According to these learners, they had not related to their neighbors in this way in the past and they expressed pride about being viewed as a educational resource to their neighbors.

SECTION 2:

THE CYBIS ON-LINE EDUCATIONAL SYSTEM: HARDWARE AND SOFTWARE

HARDWARE PURCHASE

IMSATT Corporation offered to sell "dumb terminals"[1] to the Commission. These terminals were quite inexpensive, and therefore afforded the greatest number of learners access to the system. The planning group, however, decided this was not an attractive option and that true microcomputers be purchased for the following four reasons:

1. Learners needed to become familiar with the operation of a computer and not come to know it simply as a dumb screen.
2. Stand-alone courseware which is not linked through an integrated learning system and which typically is subject specific, i.e., grammar, algebra, etc. could also be made available to learners, particularly where it might supplement the CYBIS courseware. Without a fully functioning computer, stand-alone software could not be utilized.
3. Dumb terminals could possibly present limits for future home-based learning endeavors which may rely on other courseware on diskettes rather than on-line.
4. Each of the agencies would be able to keep the computers at the end of the pilot and wanted to be sure that it was given the highest quality fully functioning equipment available.

One hundred and eight computers needed to be purchased to allow for 98 learners to participate and one base computer for each of the participating sites. Since most sites were either already using Apple Macintosh computers or wanted to build their capabilities on Apple Macintosh-based systems, all but ten computers purchased were Apple Macintosh. One agency wanted to ensure comparability with their existing computers and requested MS-DOS based machines.

The first step was to approach Apple to explore a bulk purchase of Powerbook 100's, portable computers with hard drives which would have been particularly useful to the agencies as well as more convenient and transportable. These low-end

---

[1] Dumb Terminals: A keyboard-monitor combination which does not process information itself but connects with a remote computer (called a server). Users enter information through the keyboard. The information is sent to the server which processes the information and sends back a response which is displayed on the monitor. Dumb terminals are relatively inexpensive, but if they are disconnected from the server they are useless.

Powerbooks may have been within our PLP's range, but Apple could not make 108 available within a month.

The next step was to find a used computer dealer who could meet the needs of the order and provide a 12 month guarantee. A competitive supplier who offered the computers for $400.00 each including delivery and post-delivery quality assurance was located However, the supplier needed three weeks to a month to assemble the total quantity. In addition to the used computers, a 2400-baud Zoom Modem was purchased for each computer. In making the purchases, Drexel University and the Commission were in close communication with IMSATT to ensure compatibility with the software.

HARDWARE CONCERNS

Ten significant problems were experienced with the hardware necessary to implement this project.

1. Learners did not have appropriate places to put the computers in their houses. Some had to disconnect and reconnect the computer because the only table available was a kitchen table or night table. In some cases electrical outlets were not close to those tables.

2. Frequently connections were broken between the microcomputer and the mainframe in the middle of tests, lessons, note-reading or writing. The reason for these broken connections was unclear. These interruptions had unpredictable consequences. In some cases users could log back on immediately, be taken to exactly to where they had been, and continue. At other times hours of work was interrupted and had to be repeated; a very daunting task. Using the Personal Notes section became a challenging experience. A user might spend twenty minutes composing a ten-line note (because of the response time) and then see that note completely disappear when the telephone connection was broken. This problem continued throughout the course of the project, and no real solution was devised. It did seem related to the connection; however, it was least bothersome when an 800 number was used.

3. Inexpensive computers were purchased which had re-built keyboards. These keyboards regularly malfunctioned and had to be sent back to the supplier. The most troubling aspect of our hardware purchase was that the supplier who offered a one year guarantee went out of business in the seventh month of the pilot. From that point on, the guarantee was worthless and many keyboards sit broken today. Given the declining costs of hardware, forthcoming projects may be able to afford new or higher-end rebuilt equipment.

4. The modems, which were bought new and have a seven year guarantee did not have sufficient built in error-correction capacity. When the Internet was utilized, there were frequent disruptions of service or an inability to connect. As a result, the phone to computer connection was not made correctly in approximately 50% of the logon attempts. While many learners initially were

unfazed by the flaws of the modems, the need to try logging on five or six times before connecting frustrated both learners and teachers.

5. Learners who had the call-waiting service needed to have a modified automated logon procedure. Otherwise an incoming call disrupted the CYBIS connection, and learners needed to log on again. Either *70, (for touch-tone phones) or 1170, (for pulse phones) had to be added to the logon phone number (whether a local number or the 800 number).
6. Learners with extension phones had to make sure no one else in the household used a phone in another room because this also disrupted their on-line dialog and disconnected learners from the system.
7. Unpredictable horizontal or vertical "squiggles" (as one learner called them) which seem to be caused by random static electricity occurred on some home lines, at some times, but not at others.
8. When the machines went through Bell Atlantic's Intelligate system, the software would not run on the CGA monitors. There was some kind of incompatibility, and the screens would just blank out. When they went directly through an 800 number the computers worked fine.
9. A certain vital combination of keystrokes was unusable on MS-DOS computers. Every other keystroke combination worked fine. Control Data Systems, Inc. was aware of and able to remedy this problem immediately when they were alerted to it.
10. Geometry courseware appeared incorrectly on the screens of the Apple Macintosh computers used by most of the agencies. Because the software was originally designed for EGA monitors, graphics appeared flattened on the Macintosh monitors. This was not a problem in the text-based courseware, but in geometry, circles became ovals and squares became rectangles. Very few learners in this project tried to utilize the geometry courseware.

The following recommendations should be considered when purchasing hardware for a home based learning project:

- Hardware purchases must be done through a formal contract rather than a consumer purchase mechanism to ensure that warranties are guaranteed for the life of the project and beyond when possible.
- All aspects of the software should be tested on the hardware that is planned for purchase before the purchase is executed
- Modems should be tested for as many communications protocals as possible before a purchase is executed
- Participating agencies or any sub-contractors should view the software on the recommended hardware before a purchase is complete
- A ratio of ten extra computer systems per 100 learners should be purchased so they can be loaned to learners while defective computers are repaired
- At least one system should be purchased as a demonstration model for each participating provider agency. When possible a computer should also be lent to the teacher so they can log onto the system in the evenings conveniently.
- At least one compatible printer should be purchased to enable the learners to print out their work at the community learning site
- When possible one type of hardware package should be purchased project-wide. Uniformity will avoid incompatibility issues among and between the keyboard, modem, monitor and micro-processor. Each component's unique parameters can create obstacles to implementation.
- Capture the serial numbers on all equipment before it is distributed offsite.

HOW DOES THE CYBIS SYSTEM WORK?

A brief description of how the CYBIS system works is provided to help explain the design and implementation of the teacher training carried out by Drexel University's Office of Computing Services.

1. A participant (either learner or teacher) connects their microcomputer to a **modem** attached to a telephone line.

2. After turning on the modem and computer, the participant initiates a procedure called a **logon**.[2]

2. The microcomputer then sends an electronic message through the modem which dials the telephone number of the mainframe computer. Participants can usually hear the dial tone and the ringing through the modem.

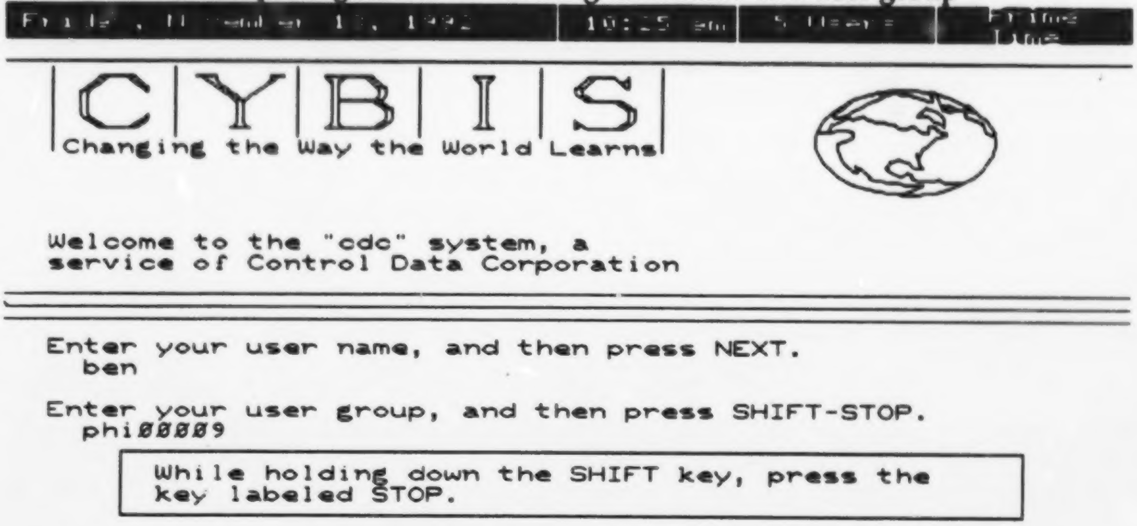
3. The mainframe answers the telephone, interprets the signals that the micro is sending, and accepts the call. This is called the **handshake**.

4. The mainframe sends a message back to the micro-computer asking for confirmation that the individual using the system is a registered participant. In the CYBIS system, there are three confirmations a participant needs to make during the logon process. They must type a user name (the unique name which each participant was given by Bell Atlantic), a user group (each of the eight literacy provider agencies in the PLP had their own user group, and the teachers had their own group list), and a password (a unique word that each user chooses for herself). This both ensures privacy and that unauthorized users would not be able to use the system.

---

[2] The term "log on" or "log in" has several meanings: the **verb** *to log on* means to use an access procedure to connect a microcomputer with a mainframe computer through a telephone line, as in, "She will log on tonight." The **noun** logon is a short-hand term for the procedure itself, as in, "This logon is too complicated, it has too many steps." *Logged on* means that the user has connected with the system, as in, "He was logged on last night for two hours," or is currently on the system, "She's logged on."

Illustration 1: Sample logon screen showing user name and user group


Friday, November 13, 1992
10:25 am
5 Users
CYBIS
Changing the Way the World Learns

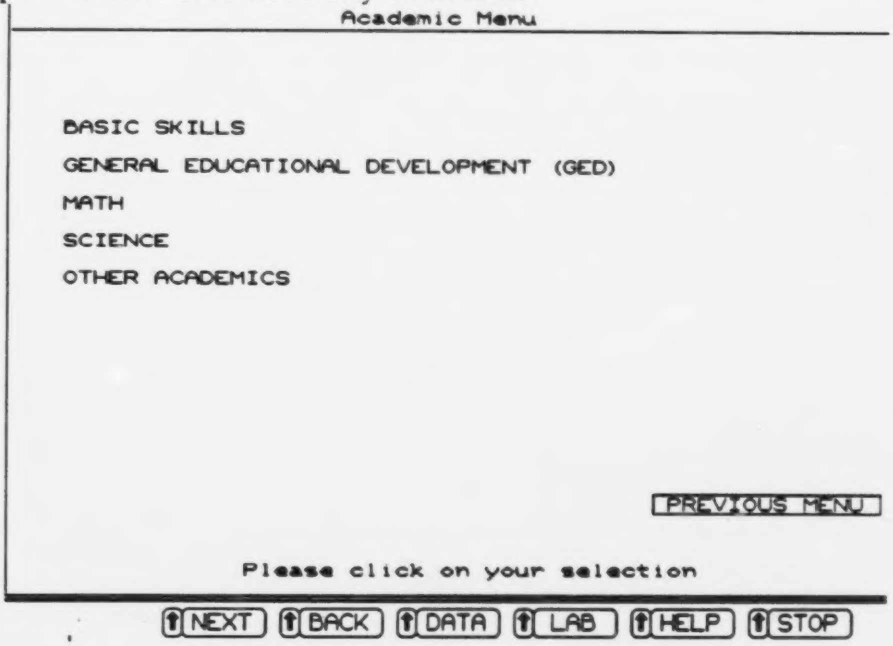
Welcome to the "cdc" system, a
service of Control Data Corporation

Enter your user name, and then press NEXT.
ben

Enter your user group, and then press SHIFT-STOP.
phi00009

While holding down the SHIFT key, press the key labeled STOP.

5. Participants then choose what they want to do.

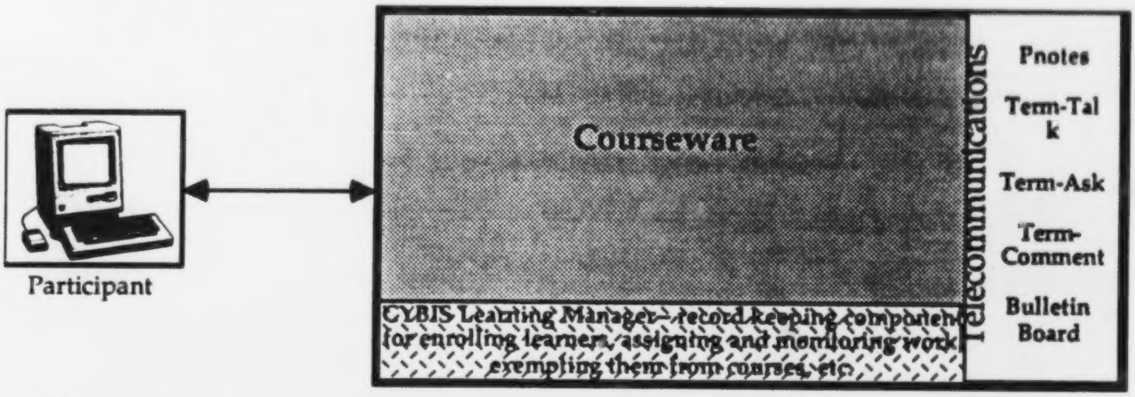

Academic Menu
BASIC SKILLS
GENERAL EDUCATIONAL DEVELOPMENT (GED)
MATH
SCIENCE
OTHER ACADEMICS
PREVIOUS MENU
NEXT
BACK
DATA
LAB
HELP
STOP

Please click on your selection

6. When finished with what they are doing, users may utilize another part of the CYBIS system, or **log off** (quit). The system keeps track of what they did. If they used the courseware, the system tracks how long they engaged in each lesson, and how well they did.

OPTIONS AVAILABLE TO POWER LEARNING PROJECT PARTICIPANTS

Illustration 2: Representation of Direct Home-based Microcomputer Contact with the CYBIS Mainframe Computer


Participant
Courseware
CYBIS Learning Manager – record keeping component for enrolling learners, assigning and monitoring work, exempting them from courses, etc.
Telecommunications
Pnotes
Term-Talk
Term-Ask
Term-Comment
Bulletin Board

The CYBIS mainframe computer has a variety of functions which were available to some or all of the participants in the Power Learning Project.

Choices in the CYBIS system available to all PLP participants included:

a. Educational courseware. Learners have a menu to choose from which includes most of the academic courseware and a wide variety of games.

b. Personal notes (P-notes) Users can send electronic messages to learners, tutors, support people, and system administrators. (These messages can be sent to individuals on the CYBIS system, not necessarily in the Power Learning Project. One of the most entertaining correspondents who communicated with PLP participants was from Sweden). When the recipient logs back on to the system, he or she receives notification on the first screen that there is "mail" for them. He or she can then read the message and save or discard it if so desired.

c. The Bulletin Board. Any user of the CYBIS system can leave topic-based messages which are available to all other users. There are sections of the bulletin board devoted to politics, education, entertainment, etc.

Choices available to teachers and administrators on CYBIS included all of the aforementioned aspects and:

d. The entire range of CYBIS courseware.

e. A display of learner records, including time on each educational lesson and progress through the lessons.

f. The ability to monitor students as they work, so to help diagnose problems they are having.

Choices available to administrators on CYBIS included all of the aforementioned aspects and:

g. Access to the CYBIS Learning Management component, where they can administer learner records, including enrolling and withdrawing, prescribing curricula for learners, and exempting learners from courses.

DESCRIPTION OF THE CYBIS SYSTEM

> The underlying assumption behind the PLATO system was that the content to be learned is fixed, while instructional time can vary. Such an assumption was viewed as a major departure from traditional instruction where class time is constant but the amount learned varies.... (This view) matches well with competency-based instruction and ... mastery learning... (and) assumes that knowledge is sequential, incremental, and can be broken into parts.[3]

When a learner logs on and chooses a curriculum, she is given a diagnostic test which places her in the curriculum at the appropriate course. The assessments have between sixty and one hundred questions each. As soon as the learner makes several mistakes the assessment concludes. If she answers all the questions correctly she can pass out of the course in to the next course. Otherwise, the assessment places her in an appropriate course. Within the course she receives another diagnostic test, and she is "branched" to the next appropriate lesson in the module.

In the appropriate lesson she receives instruction that builds sequentially on what she already knows. There is an advance organizer, telling the learner what she is going to study. There may be a two or three question assessment which can pass the learner on to the next level. Otherwise, there is interactive instruction where the learner gets information about the topic she is studying, answers multiple choice questions based on the material she has studied, and finds out how she did. If she mastered the material (usually to a 80-90% level of correctness), she goes on to the next "higher" lesson. If she has not mastered the material, she goes through the lesson again. After finishing all the lessons in a module, she receives a review assessment, in which she either moves "up" to the next module or returns and reviews the material until she does master it. After she finishes all the lessons in a module she takes a review test, and if she masters it then she goes to the next course. The lessons are between fifteen and thirty-five minutes in length. They are designed to proceed in small steps, with frequent reinforcement in the form of "Nice job" and "Good going" comments. There is a great deal of review, so learners get to practice their learning many times.

---

[3] Turner, pp. 4-5

There are thousands of hours of lessons available on CYBIS [4] but only some of these are appropriate to adult literacy learners. Lessons are grouped into modules, modules into courses, and courses into curricula. An example of the relationship of lesson to module to course to curriculum is the basic skills mathematics curriculum (117 hours) which has thirteen courses: Basic Number Ideas, Addition 1 and 2, Subtraction, Multiplication 1 and 2, Division 1 and 2, Fractions 1 and 2, Decimals, Ratio, Proportion and Percent, and Geometry and Measurement. These courses take between six and sixteen hours to complete. Each course has between six and twelve modules, each of which is usually composed of three lessons.

Theoretically, all of the courseware was available to the participants in the PLP but practically the following were the appropriate full curricula from which they could have chosen:

Name of CYBIS Curriculum	Hours Available on CYBIS
Algebra	75
The Basic Skills Curriculum	
Reading	180
Grammar Rules	56
Basic Math	117
Introduction to Computer-Based Education	8
English as a Second Language for Spanish Speakers	64
General Educational Development Learning System:	
Mathematics	33
Reading	42
Writing	46
Science	42
Social Studies	40
Computer Awareness	5
Geometry	45
Metric Number Conversion	1
Total Number of Available Hours of CYBIS Courseware	762

---

[4] See **CYBIS Courseware Catalog** for lists and descriptions of the available courseware in the academic, technical, data processing, professional development, management, and finance areas.

TECHNICAL AND COURSE-RELATED CONCERNS

When the agencies involved decided to participate in the Power Learning Project most of their questions centered around the curriculum-- would it be flexible enough for agencies which support the language experience approach, would it be appropriate for Asian ESL learners, or did it relate to the current GED test. There was little concern expressed about the technological aspects of the program. This may be because technological concerns were downplayed during the discussions between IMSATT and the agencies. It may be because of the confidence they felt towards the support system (Drexel, Bell Atlantic, IMSATT, and Control Data). It may be that it seemed like a trivial issue because the project would never have reached the stage of implementation if the technology was not ready for it. However, none of the administrators, teachers, or even support staff fully understood the system or the technology enough to ask some of the most important technical questions.

Bringing on-line real-time educational software into people's homes is **not** a technically trivial problem. Several of the most onerous, time-consuming and participant-frustrating problems with CYBIS were directly related to what were presented as relatively minor technical issues at the beginning. It was unclear to the support staff at Drexel which support problems were their responsibility, which were Bell Atlantic's, which were IMSATT's, and which were Control Data Corporation's. As Drexel developed the knowledge needed to resolve the problems over the course of the project, they were able to provide answers more quickly.

Information needed to get from a microcomputer in Philadelphia through a telephone line to Control Data's mainframe computer in Minneapolis. The mainframe then needed to process that information, determine what response was necessary, and send it in a timely manner over the telephone line back to the micro in Philadelphia.

Studies have shown that the more quickly individuals receive a response (preferably between .3 and .6 seconds), the more motivated they will be and the more they will learn.

Throughout the course of the project there were four different ways used to accomplish this communication. The fastest and best of these processes was also the most expensive. The slowest was the least expensive, taking approximately 1.5

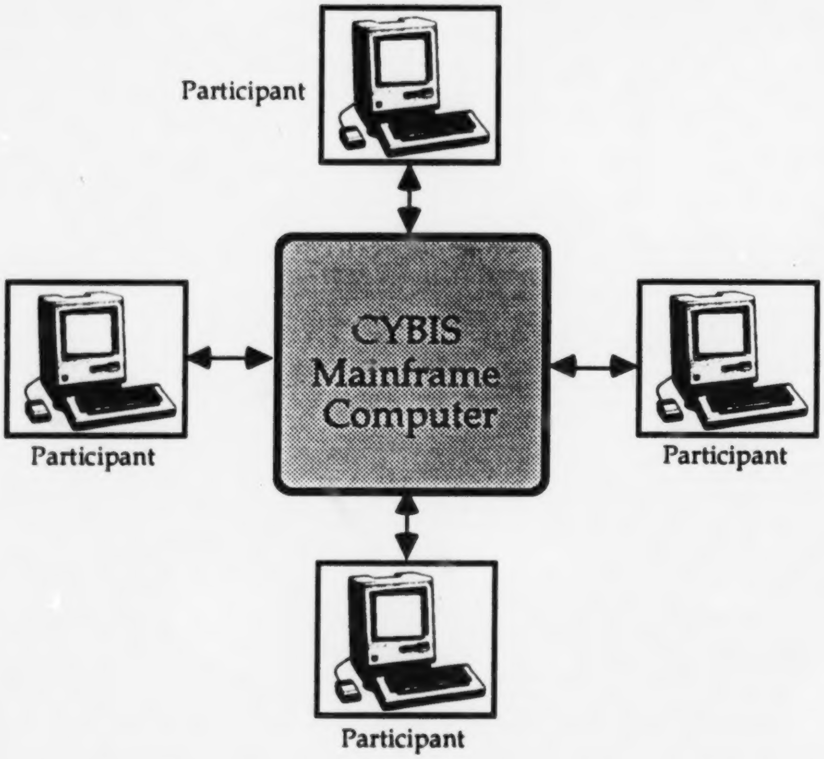
seconds to send and receive one typed character. This is very slow -- unacceptably slow -- according to both expert sources in the field of electronic mail and the teachers and learners in the PLP. Students can learn to slow down when they are typing in answers to a drill and practice session, so it is marginally acceptable for this purpose. But it is far too slow to encourage fluent writing/typing. When using the direct phone line the response time (per keystroke) was between .2 and .3 seconds. A person can compose a paragraph at this rate, but throughout the course of the project this speed was only available to teachers, because of funding issues.

Learners were very patient as their teachers were trained, networking software was adapted, and several sets of passwords and logons were developed for the various protocols. But since these issues were not resolved before the beginning in the project, some learners became upset, confused, bewildered, and "turned off" to the computer, as was attested in cases where learners logged in to the system before the logon process was perfected. (See student comments.) Below is a record of the evolution of the logon process in the PLP.

(logon 1) In October, Drexel staff were given a logon procedure which worked on DOS-based computers, even though it had already been agreed that the majority of the agencies would be using Apple Macintosh computers. It took several weeks before Control Data provided a Macintosh logon.

(logon 2) The Macintosh logon, received in mid-November and distributed to the literacy agencies in late November/early December, utilized a free 800 telephone line provided by IMSATT. It involved a set of 12 steps before even getting into the educational software. Once an individual logged on, the program worked well and quickly. Teachers used this system until early January.

Illustration 5: The Participant Connection: Direct to CYBIS



(logon 3) The teachers felt that the 12-step logon process was too cumbersome for learners. Logon procedures are not forgiving, and there were too many places where a single mistyped or forgotten character would throw the user off of the system. It was the understanding of the Drexel staff that Bell Atlantic was responsible for simplifying the logon. They were unable to do so, and the problem was then referred to Control Data. They were able to create an automated logon which required only a single simple step to initiate. Making this change, which involved less than 20 lines of programming, took over three weeks to perfect. It involved numerous negotiations among teachers, Drexel, Bell Atlantic, IMSATT, and Control Data. This time lapse occurred because, despite the assurances of IMSATT that the program would work fine on Macintosh computers, neither Control Data nor Bell Atlantic were familiar enough with Macintosh to come up with the solution quickly.

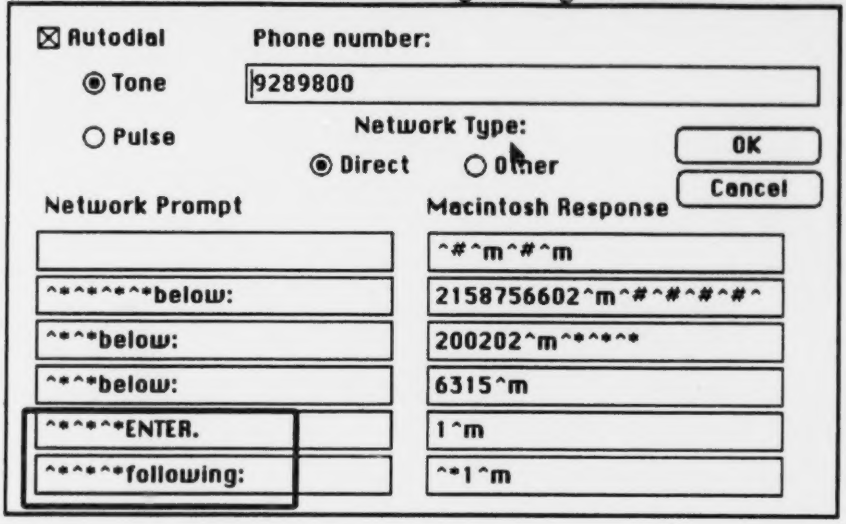
Each 800 call was very expensive (approximately $12 per hour of connect time). IMSATT informed the Drexel staff of the need to switch over to the line Bell

Atlantic had allocated through their Intelligate service, which would be much less expensive.

(logon 4) The Intelligate system added a new level of complexity. Since Intelligate had its own separate 4-step logon routine, a new simplified logon needed to be developed which would get users first into Intelligate, then automatically connect them with the CYBIS system. Again there were negotiations among teachers, Drexel, Bell Atlantic, IMSATT, and Control Data, again there were a number of trial-and-error attempts, and again it took three weeks to resolve these problems so that every learner and teacher could log on from their home bases with a simple single command. As can be seen from the responses from teachers and learners at various times during the course of the project, this was agonizing and created a somewhat negative mindset, although eventually it worked.

Automating the logon involved the learner's computer sending certain messages, waiting for a reply from the mainframe, sending another message, receiving another reply, and so on in a "conversation" where each computer sent and received between 10 and 20 comments until logon was finished. Several times during the course of the project the administrator of the mainframe changed the replies they sent out without informing anyone involved in the PLP. In fact, once they were specifically asked if they had changed their computer's script and they said they had not. The changes may have been as simple as sending the word "following" instead of the word "Enter," **(see illustrations 7 and 8)** or asking that users input the number 1 in a different place. However minuscule the change, it would disrupt the flow of the logon procedure and render it unusable. It often took learners several days to report this to their teacher, several more days before the teacher ascertained that this was not an individual's difficulty, several more before it was communicated to Drexel, and perhaps several more before it could be fixed. This happened many times throughout the project, from January through June.

Illustration 6: Automated Intelligate Logon, 10/23/92-1/12/93



☒ Autodial

● Tone

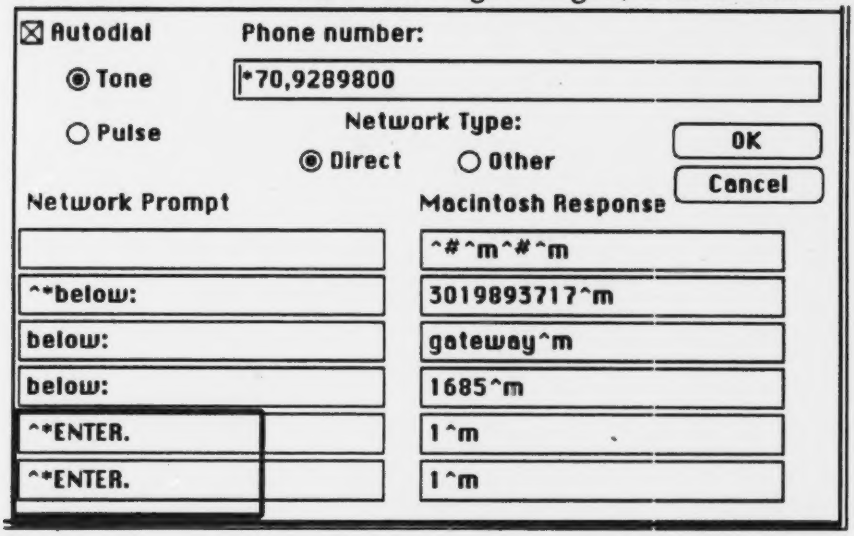
○ Pulse

Phone number: 9289800

Network Type: ● Direct ○ Other

Network Prompt	Macintosh Response
	^#^m^#^m
^*^*^*^*below:	2158756602^m^#^#^#^#^
^*^*below:	200202^m^*^*^*
^*^*below:	6315^m
^*^*^*ENTER.	1^m
^*^*^*following:	^*1^m

Illustration 7: Automated Intelligate Logon, 1/13/93-4/26/93



☒ Autodial

● Tone

○ Pulse

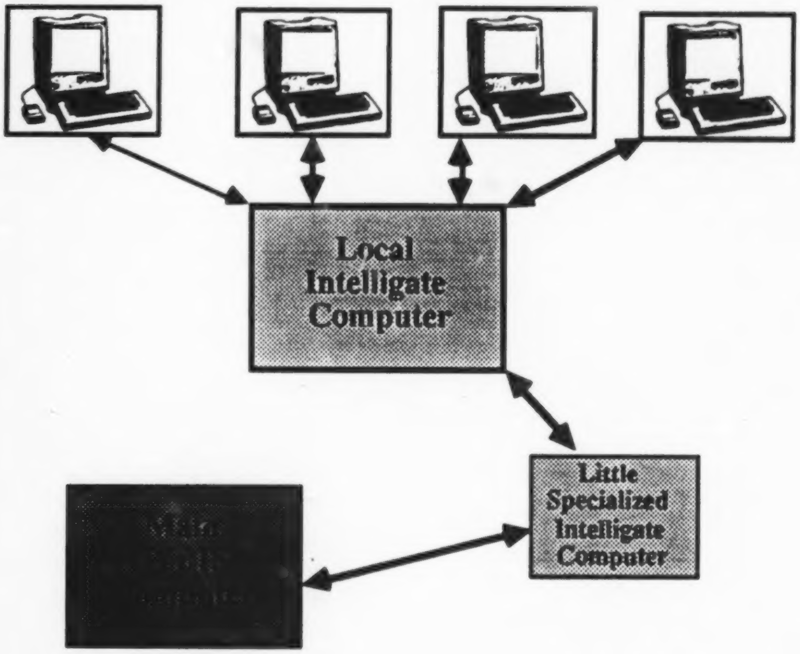
Phone number: *70,9289800

Network Type: ● Direct ○ Other

Network Prompt	Macintosh Response
	^#^m^#^m
^*below:	3019893717^m
below:	gateway^m
below:	1685^m
^*ENTER.	1^m
^*ENTER.	1^m

Using the Intelligate system also slowed down the communication with the CYBIS mainframe. Now, not only did information need to go from a micro to a mainframe and back again, but it had to go from a microcomputer, be converted so it could be read by Bell Atlantic/Intelligate's local mainframe, reconverted on the way out to Control Data's Minneapolis mainframe, sent back to the local mainframe and converted coming in and again going back out to the micro sitting on the learner's desk. **(See illustration 8.)** Using this logon, it took approximately 1.5 seconds to send and receive each character. Given the number of processes and protocols the message goes through, this technology is truly amazing on a theoretical level. Judging from the experiences and comments of the learners and teachers, it was almost unusably slow. Learners could slow down when they were typing in a single letter answer to a multiple-choice drill and practice session so it was marginally acceptable for this purpose. But it was far too slow to encourage fluent writing/typing. Since on-line communication and letter-writing was a significant part of the reason several agencies joined the project, this slow response time proved a serious disincentive to using the system. When using the direct 800 phone line the response time (per keystroke) was between .2 and .3 seconds.

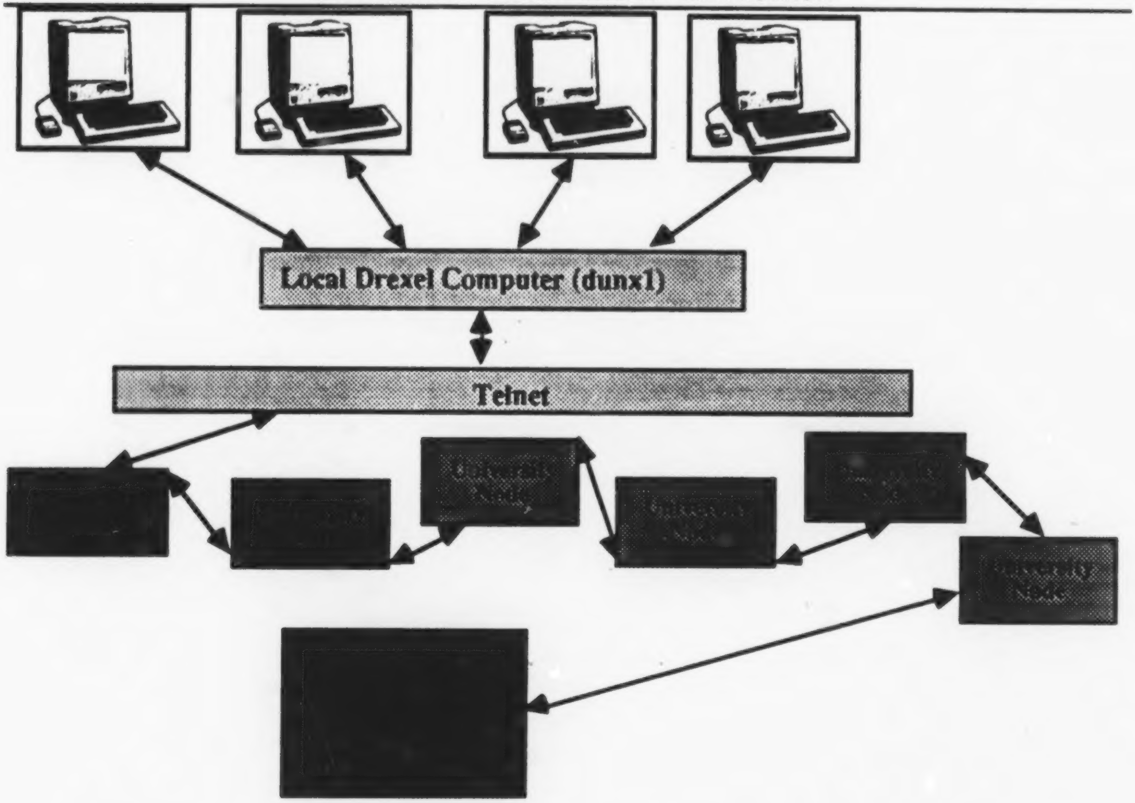
Illustration 8: The Intelligate Connection


Local Intelligate Computer
Little Specialized Intelligate Computer

(logon 5) After receiving numerous complaints from learners and teachers about the slowness of the communication, a meeting was held. Bell Atlantic indicated that the company was unwilling to invest the approximately $16,000 necessary to upgrade their mainframe so that the conversion protocols would be accomplished more quickly. Drexel offered to allow the PLP to utilize their *Internet* access. The *Internet* is a connection subsidized by the Federal Government and available to most universities for a relatively low cost. By this time the Drexel staff understood enough about how to automate the logon process to devise a functioning model.

Again, getting the right software (which was completely different from the former software), getting permission from Drexel's administration, and perfecting the logon, took another three weeks. Unfortunately, while faster than Intelligate, it was still too slow and undependable to be an ideal solution. The *Internet* works on a node system, so that a message sent to Drexel may be bounced to two, six, or seventeen nodes at different universities throughout the world before it reaches Control Data's computer. So sometimes learners would receive keystroke responses in less than .5 seconds, while other times they would be over 1.2 seconds. An average response time over the *Internet* was slightly over .8 seconds. This would have been marginally acceptable, but Drexel only has a limited number of modems connected to outside lines, so occasionally learners logging on were unable to get through to the system.

Illustration 9: The Internet Connection



(logon 6) Late in May, IMSATT arranged for a connection through CompuServe, a well-known national computer network. This connection was fast, but again, too expensive for a long-term solution.

Throughout the course of the project, six major revisions in the logon procedure were necessary Other "tweaking" was also sometimes required (such as typing the number "1" after the entire logon procedure).

It was a matter of great concern to Drexel and the teachers and learners that it took so long to evolve a reliable, usable logon. An inordinate amount of time and energy was spent on developing what should have been a simple gateway into the program. Six different logons for a six-month project! This time could have been better used to support more complete integration of the system into classroom instruction, teacher training, or simply learner time on task.

In replicating this project, we highly recommend that the logon procedure be perfected before implementation. Because previous CYBIS Projects took place in networked computer labs, presumably logging on was simple and done by the administrator. Apparently no one realized how difficult it would be to operate the system from people's homes. IMSATT, Control Data, and Bell Atlantic all gave this issue scant attention, implying that it was not going to be a significant problem, and Drexel, MCOL, and the participating literacy agencies did not know any better. Thus, the entire project was delayed by nearly two months, and participants became frustrated by what should have been a minor technical issue.

Logging on: Other Factors

Several other factors related to logging on to the system should be mentioned here.

Passwords: Each user of the CYBIS system either chose or was given a password, both to ensure that non-participants were not able to get into the system and so that learners' privacy would be protected from other learners and even teachers or system administrators, if they wished. Passwords also promoted a sense of control among learners, and a willingness to take chances which they might not have if they are being "watched." Early in the project, many learners had difficulty remembering and using their password correctly, and since the computer system permits no latitude in the logon procedure, each time this happened they needed to contact a teacher and relearn their logon. Once the systems were automated, this became less of a problem, because the automatic logon procedure (how a learner gets on the network and into the educational program) included their password. Other unique, intermittent, or non-recurring problems came up and were solved on a case-by-case basis.

The Power Learning Project involved "conversations" among numerous network protocols (Mac to CYBIS to Mac, Mac to Intelligate to CYBIS to Intelligate to Mac, Mac to *Internet* to CYBIS to *Internet* to Mac, Mac to CompuServe to CYBIS to CompuServe to Mac). Finding ways to get these protocols to work together originally did not seem technically difficult, but doing it in ways that made the conversions transparent to adult basic education students proved to be a harder task than expected. Persistence was eventually rewarded, however, and by the end of the Power Learning Project these issues were largely resolved.

Other Courseware Concerns

For some of the learners the course-level assessment was a disincentive to consistent usage. The assessments typically took 30 minutes to an hour to complete. Learners understood that if they passed the assessment they could by-pass the entire course -- equivalent to eight hours of study -- but their feedback indicated that they felt the assessments were too lengthy. Whereas in the courseware the learners received frequent feedback, the assessments provided none until the assessment was completed. Many learners wanted to know how they were doing as they proceeded through the assessment.

In addition, because of technical problems experienced throughout the course of the project, learners were frequently thrown off the system. Often in the middle of a long assessment test, the system failed to store their answers. Learner logs indicated a very high degree of frustration in this particular regard. Some of the courseware instructions were at a higher reading level than the courseware to which it related. This caused problems for learners.

In one instance, learners completed a lesson, took the final test, and were routed, not to the next lesson or module, but back to the beginning of the lesson they had successfully completed. (After being informed about this error, CDC corrected their software, but a number of learners were bothered by this problem.)

These kinds of technical problems caused great frustration, confusion, and self-doubt, but also led to some important critical thinking about technology. For some of the learners, it seemed easier to doubt themselves or their understanding of a situation than it was to doubt "the computer." Others logically deduced that there was something wrong with the courseware. One of the triumphs of this project occurred when learners reached the stage (as many did) where they first questioned whether there was a hardware or software error when something unexpected or awkward happened rather than questioning themselves.

Because the software was developed over several years, there are some discrepancies in the way answers are indicated. In some lessons, an answer was selected by clicking on a letter *a, b, c,* or *d*. The courseware recognized the keystroke automatically and responded to it. In others, an answer was selected by typing a letter and pressing *Return*. The higher level readers seemed able to deal with occasional inconsistencies by reading instructions when necessary, but it was not possible for the lower level readers to understand and carry out inconsistent directions. The instructions should be written at a lower reading level. A more graphic interface would be useful. Courseware giving auditory verbal directions would be most useful for ESL and low-level readers.

WHY EACH GROUP DID NOT AUTHOR ITS OWN CURRICULUM

In negotiations with IMSATT, one of the repeated requests from teachers was whether the teachers would have the capability to change the ordering of lessons. They were assured that they did have this capability. While technically it was possible for teachers to do this for their groups (or even to set up a unique curriculum for any individual in the group), it was neither as simple or as quick as was implied. In addition, in order for a teacher to create such unique curriculum, that teacher would need to take time both to explore all the available software and to decide in what sequence he/or she could prescribe it for their learners.

It was possible for learners to take individual lessons; however, if this feature was activated, tracking of that learner was no longer possible until he or she returned to the system-determined paths. Teachers did not choose to work with individual lesson selection for the aforementioned reasons. Most often teachers also came to appreciate the greatest strength of using an integrated learning system i.e., the linking of lessons into modules, incorporate modules into courses, and coordinate courses into curricula. Many curricula were previously constructed by CDC or previous users of the CYBIS courseware, including a Basic Skills curriculum, a GED curriculum, and an English as a second language curriculum.

Drexel University spent many hours reviewing the courseware and found that the recently updated Basic Skills curricula was quite well developed. Thus, the providers decided to utilize this curricula, but insisted on the opportunity of making available other lessons, when they might apply to the individual needs of various students. Items learners and teachers wanted access to which were not available in the curricula included the following: games, a variety of extra grammar and business-related lessons, and computer literacy materials.

INTEGRATING THE SOFTWARE WITH AN INSTRUCTIONAL PROGRAM

The diversity of the eight participating literacy organizations fostered the development of several different models for blending the courseware with the teacher's curriculum. The degree of integration varied. There was a direct relationship between the degree of integration and learner usage of the software. The following six models are presented in rank order, beginning with the optimum and moving to the less effective approaches, based on the degree to which learners from each program utilized the on-line system.

1. Integrated and Segregated Class/On-line Class

In order to ensure that learners were on the system at least weekly, this format required the learners to attend basic skills classes for six hours a week. A second teacher was added for the PLP who provided two extra sessions: one on Tuesday evenings for three hours at the community learning center to learn how to use the on-line system and work on lessons (for the purposes of discussion it will be called PLP Session I), and a second session on Thursday evenings which was instructed "on-line" for three hours (PLP Session II). Thus, the teacher in this case provided an additional six hours of support to the learners, three hours of which was done in a "distance learning" framework.

PLP Session I classes were mostly devoted to explaining the system and the options for usage. When necessary, the teacher logged on to the system to demonstrate new options or to resolve problems via the one computer at the site which had a modem. When time permitted the teacher would provide basic skills instruction on math or reading issues that were posed by the learners.

The teacher logged on to the system from her home for PLP Session II sessions. The teacher asked each learner to spend one and a half hours on math and then one and a half hours on reading lessons during the three hour session. Since the computers were being used at this site to help the learners build their math skills particularly, learners were asked to work on the math lessons first. The teacher would send each learner a note and ask each learner to begin his/her lessons. Lesson selection was done via the system's on-line pre-testing and placement functions only, neither the teacher nor learner directed her lesson selection. The teacher noted that by offering class via the computer those learners who could not get child care were still able to attend and interact with their teacher and fellow students via the on-line communication functions. The teacher also noticed that learners who missed the in-person class tended to log-on for extra time during the week to make up for the absence.

The teacher would often monitor the lessons from her computer and when necessary offer guidance through the on-line communications functions. While monitoring was often done, the learners had to initiate the process by asking for help from the instructor. This policy was adopted to ensure learner privacy and to give learners control over the learning process. If the learners did not ask for help, the instructor would send general guidance and encouragement to the learners while they were on line through the "Term talk" and "P-note" functions of the system.

In this model there was no direct relationship between the basic skills instructor and the PLP instructor, so the computer lessons did not necessarily correspond to with the classroom instruction. However, the agency felt that the learners needed extra support in the development of their math skills, thus the heavy emphasis on computer based math lessons. The learners did not just access the on-line math lessons during PLP Session II these learners, more than any others in the pilot, worked on the math lessons when they logged on throughout the week.

It is also important to note that the site which used this model had a former learner/graduate of their GED program serve as the computer instructor.

2. Integrated Class/On-line Support

In this format the learners were required to attend one, three hour class a week at their community learning site. The teacher had the role of offering basic skills instruction support as well as showing the learners how to use the on-line system. To accomplish this, the teacher, through both informal and formal assessment instruments, became familiar with the learners' basic skills levels and worked with the learners to set skill-specific learning goals. The teacher spent several weeks demonstrating how to use the system via the one computer on the site which was linked to the on-line system. Learners were initially given homework assignments which built their facility on the on-line system. After three weeks the teacher and learner together identified the lessons which would be the greatest help in addressing the learning goals of the individual. Thereafter, the class time would be used only to discuss computer problems and to introduce the P-note and other communication functions. The bulk of the class time eventually, after six to eight weeks, was spent on basic skills instruction on an individual basis.

In addition to integrating the usage of the system into class, the teacher regularly signed onto the system in the evening sending encouragement to learners and answering their questions.

3. Integrated Class/Weekly In-person Discussion/On-line Support

This approach relied most heavily on the basic skills instructor to integrate the on-line system into her regular instruction. In this setting, learners came to a three hour class at the community learning center twice a week. Since the learners at this site were learning English as a second language, the learners worked on the computer lessons as the computer directed them via the built in pre-testing functions. The system offered instructions in Spanish, so that learners were able to navigate the system rather easily. Nevertheless, the basic skills instructor typically spent one third of class discussing on-line problems and progress.

The instructor's efforts were supplemented by a fellow teacher who met each Saturday morning with the PLP participants to provide further encouragement and support to the learners. At these meetings the teacher would review the lessons with the learners and offer feedback. He also introduced the learners to the many communication functions of the systems. The instructor used the one computer at their site which was connected to the on-line system (via modem) to help learners resolve system problems. Further, the teacher helped the participants explore options for working with their children on the system's on-line educational games and lessons. In addition to these weekend meetings, this supplemental teacher was regularly on the system in the evenings to offer additional encouragement and guidance to those students who asked the instructor to help them with a lesson.

Although these models are presented in rank order, the level of success of all three approaches was very high, with insignificant variance. The key attributes of these three models are as follows:

- High degree of feedback to learners;
- High degree of teacher interaction with the learners on the system; and
- Consistency of goals between basic skills instruction and on-line lessons.

4. Classroom Instruction/Learner Motivation

In this setting, the provider did not vary or link their classroom instruction with the on-line system; however, the instructional approach in this setting included basic skills instruction on networked computers at the site. Thus, the learners in these sites had a relatively high level of familiarity with computer assisted instruction. The teachers simply showed the learners how to use the system in the first couple of weeks of class and then relied on the learners to access the system without much encouragement or tracking.

5. Basic Introduction and Volunteer Support

Learners in this community learning site were given ten hours of introductory instruction on how to use the computer system. Each introductory session was two and a half hours in length; sessions were held twice a week for two weeks. After this introduction the teacher did not include any discussion of the computers in the class time and no effort was made to match learning goals with on-line instructional opportunities. Despite the absence of classroom focus, the provider relied on a VISTA volunteer to be in regular contact with the learners via the telephone and on-line to encourage usage of the system. The VISTA volunteer regularly attended the basic skills class, talking briefly with learners after the class about their progress on the system.

6. Volunteer Tutoring

Although the model was developed to enhance the impact of classroom-based instructional programs, one agency decided to integrate the computers into its volunteer tutoring program. To get the program under way the site coordinator, a full-time paid adult educator, delivered the computers to the homes of each adult learner. The delivery day was also used as an opportunity to provide one-on-one instruction on how to use the system. One to three hours of introductory instruction was offered, depending on the learner's needs. The site coordinator asked the learner's volunteer tutor to accompany him for the introductory session so that the tutor would understand the system and attempt to integrate it into the learner's tutoring program. Thereafter, the site coordinator did not provide any further in-person instruction unless the learner requested it. The site coordinator did, however, offer encouragement to use the system via the telephone and electronically.

LEARNER'S USE OF COURSEWARE

Learners tended to work primarily in the basic and GED preparation modules for math, grammar and reading. An ESL program with Spanish speakers accounted for the extensive use of the ESL for Spanish modules. The writing, social studies, and science GED preparation modules were accessed less frequently.

Course	Total Hours
Basic Grammar	352.6
ESL for Spanish	213
GED Math	201
Basic Reading	153.2
Basic Math	77.4
GED Reading	75
GED Writing	44
GED Social Studies	27.7
GED Science	16.5

The following snapshots describe the variance in usage among the agencies:

Group 1 90% of the learners regularly accessed the system. Each learner logged on to lessons more than eighteen hours. One learner worked more than 45 hours to build her skills.

Group 2 83.3% of the learners continued to use the system through the end of the project. Eleven learners have been on the system more than 32 times, many logging more than 40 hours in lessons.

Group 3 80% of the learners continued to use the system through the end of the project. One learner has logged on to instructional sessions for 8.6 hours, the rest of the learners have been on less frequently.

Group 4 64% of the learners continued to use the system through the end of the project. In this project, family members were shown how to use the system in addition to the enrolled learners. Many of the family members used the system sporadically but without any clear pattern or consistency. Those accessing the system logged up to 23 hours in lessons; the average usage was approximately six hours.

Group 5 50% of the learners continued to use the system through the end of the project and 90% had accessed regularly through April. Learners logged on to lessons for up to 37 hours; the average was 17 hours.

Group 6 43% continued to use the system through the end of the project. This is a one-to-one tutoring setting; thus, institutional support and follow-up tended to be minimal. However, one learner accessed instruction quite frequently, logging 136 hours and more than 78 sign-ons.

Group 7 25% continued to use the system through the end of the project and another 41% were on for three months. This program also suffered from teacher turnover during the eighth week. As a result, the learner log on was very low; the average use was approximately one and a half hours.

Group 8 16.7% continued to use the system through the end of the project. Teacher turnover has resulted in very little learner participation.

The average usage was lower than anticipated. Learners were asked to use the computers at least six hours a week. While some used the computer six hours in one sitting, most did not achieve a six hour a week average.

When the Community Women's Education Project (CWEP) students were given their self assessment forms, they began to give each other feedback. Specifically, one student noted how another student's vocabulary skills had improved since she began working on the computer. The instructor at CWEP pointed to significant improvements in one student's spelling skills. She remarked that the computer helped the learner focus and practice until she knew spelling rules. Another learner has become a self-appointed assistant computer instructor, which the instructor indicated was a result of elevated self-esteem and a zest for using technology to learn not extant prior to the Power Learning Project.

At Lutheran Settlement House Women's Program (LSH) several of the learners indicated that the computer helped them build math skills. They also remarked that the computer was a tremendous resource, especially when they missed class. They often made up the lessons at home with the computer.

Learners at Temple and Drexel Universities commented that they saw fast improvement in their grammar and vocabulary skills due to the computers and they regularly gave younger siblings and their children access to the system to build their grammar and math skills.

ASPIRA's group of women faced the greatest challenges, as it took several months to overcome start-up obstacles. However, after being on the computer for just three weeks, improvement was noticeable and usage was extraordinarily high. ASPIRA is currently pursuing further funding to continue the project since a number of their learners completed all or major portions of the Spanish ESL curriculum.

Increased self esteem among the Power Learning Project participants was also noted by each instructor. However, programs that coupled the computers with one-on-one tutoring models or chose beginning learners did not see the same degree of impact.

Each instructor noted a clear and regular increase in learners' comfort with technology. However, the impact was at a lower level in the one-to-one model and with the early learners.

Retention for the classroom programs was 75 to 100%. The instructors attribute this to the excitement generated and support offered by the computers. The classroom instructors indicated that their typical retention rate would be between 50 to 75% without the computers. Retention was very high with the early learners as they struggled through the system. In the one-to-one tutoring setting, there was no significant impact on retention among the Power Learning Project participants.

The Center for Literacy compared the number of hours that Power Learning Project participants attended class versus regular students and found a 57% increase in classroom attendance among Power Learning Project participants who attended class an average of 43.16 hours between January and April. Those in the control group attended class 24.5 hours in the same time period.

The Community Women's Education Project found that their 75% retention rate was high for a program that did not provide stipends for students. The retention rate was particularly impressive because their Power Learning Project class met in the evenings, after most of the students had worked all day. Learners shared that they stayed because they enjoyed working on the computers at home and because of the support and instruction they received in class from each other and the instructor.

Programs where there was staff turnover were unable to maintain student participation. This was manifested in a very clear student drop-off after the turnover took place. New teachers were not able to be trained on the system orientation quickly enough to pick up where the previous teacher left off.

All of the teachers indicated that they were very interested in the networking and on-line communication capabilities of the system through which they could send mail either to another individual or post it to a bulletin board. Toward the end of the projects learners began to utilize this as a way of writing to learners in other programs. This offered new opportunities for communication and letter-writing and an effective means through which learners developed their writing skills. A review of the E-mail records indicates that 100% the learners who worked on the system for 10 hours or more used the E-mail or bulletin board functions of the system.

Unfortunately, as noted in the previous section connectivity and telephone problems had an extremely disruptive effect on the possibility of extensive writing. Several spin-offs of this project (including a project taking place with residents of homeless shelters supported by the National Center on Adult Literacy) will pursue this intriguing dimension of networked software.

Learner Responses to the Courseware

Learner and teacher log entries indicated that learners appreciated the opportunity to choose alternatives to their "prescribed" curriculum. They also valued being pretested, assigned lessons and post-tested. If successful, learners advanced to the next lesson or module in the curriculum. If unsuccessful, they received remedial lessons until they achieved mastery on their tests.

Based on conversations and journal entries, it was concluded that sixty percent of the teachers were very comfortable with mastery learning as a general philosophy of education. The others felt it was not sufficiently broad for every learning situation but was worthwhile in specific situations to augment class instruction. Some felt it did not involve learners in evaluation, synthesis, problem-solving, decision-making, critical thinking, or other high order thinking skills. These concerns rested on their belief that adult learning must be contextual, based in community experience. Nevertheless, they agreed that in certain domains drill and practice programmed learning would be useful to at least some of the learners. At the conclusion of the pilot phase the teachers unanimously agreed that the software was effective.

As previously noted, there were many technological stumbling blocks to accessing the CYBIS system. It should be stressed that these difficulties do not detract from the completeness or usefulness of the courseware itself, which both learners and teachers felt enhanced their potential for learning. Learners who were able to access the system and stay on were able to progress through the material and, as is indicated in the Impact Evaluation make significant improvements in their skill levels.

Based on the Power Learning Project experience the following steps are recommended when purchasing on-line software packages:

- After meeting with a software sales representative be sure that the next meeting includes a member of the technical or software development unit of the company. Confirm all system attributes with the technicians;
- Hands-on access to the instruction and record-keeping capabilities of the software must be provided in the early stages of negotiations. For on-line systems, real-time log-on and perusal of the system must be provided. Log-on and perusal must be conducted on the exact hardware on which the system will operate. If more than one type of hardware is going to be used, the system must be tested on each hardware type. Log-on and graphic capabilities are very sensitive to hardware specifications.
- Purchase contracts must clearly outline the ongoing technical support offered by the software company. For on-line systems, down-times must be specified and re-routing mechanisms must be spelled out in case certain phone lines, computers or switches fail.
- The phone carrier must be included in all negotiations for on-line systems, and written documents must specify the carrier's responsibilities for transmission.
- Documentation for the program and workbooks must be available for all participants.
- Pre and post testing elements of the software should be reviewed for congruence with the instructional objectives of the overall program and with any non-computer-based assessments which the students are expected to complete.
- Payments for on-line services must be staggered throughout the pilot to protect the literacy agencies and ensure continuous access to the service. The City of Philadelphia's contract with IMSATT is attached. The negotiation of the contract was extremely difficult, yet invaluable resulting in the clarification of many vague details.

- The phone carrier and the software company must have common and reasonable expectations regarding the speed in which the telecommunications systems operate.
- Log-on protocols for each hardware set-up must be developed and tested before the program is implemented to assure reasonably rapid response time and that the log on is reliable more than 80% of the time..
- Because of the technical complexities of distance learning collaborative projects should bring participating providers on-line one at a time to assure that the system is fully operational for all learners as they are brought into the project.
- Ensure learner privacy through the use of passwords and guarantee that learners have control over a teacher's ability to monitor their work while they are within lessons.
- High learner usage can be fostered by fully integrating the software into the classroom curriculum and by providing learners regular feedback about their CAI progress.
- If providers rely on computer based assessments to place learners in the curricula, the learners must be given a great deal of support and encouragement to complete the lengthy assessments.
- The integration of E-mail and immediate access to on-line feedback while learners where in lessons builds motivation and higher levels of learner usage.

SECTION 3:
TEACHER TRAINING AND SUPPORT

TEACHER TRAINING

It was clear from the inception of the Power Learning Project that teacher training was an indispensable aspect of the Project. It involved eight literacy agencies, their teachers and learners, and computers widely dispersed in people's homes rather than a centrally placed learning laboratory. This project required a unique training model due to the following variables:

- Agencies with different educational philosophies wanted to use CYBIS in different ways and the Commission made a commitment to facilitate this diversity;
- Agency staff, not merely a lab manager, would be allowed and encouraged to gain responsibility, control, and comprehension of the system;
- Teachers required control of the software curriculum so that when necessary they could make individual adjustments.

These factors, promoted the development of an alternative training strategy. The intention was to encourage each teacher to become expert on the system by offering two-hour monthly trainings (all the time the instructors could spare) which provided information on various aspects of the CYBIS learning system.

Drexel's staff received a two-day overview training in how to operate the CYBIS system from Control Data Corporation on November 19-20, 1992. (See **Training Outline** in Attachment 3) and were given copies of the rough draft for the CYBIS Courseware Delivery Guide and a Quick Start Guide to give to each literacy agency. Drexel's staff then took the training guide and evaluated what would be the most relevant to the teachers for each monthly training. The training followed the general pattern in the Basic Learning Center Manager's Course.

At the beginning of each meeting, each teacher would update the group about the progress of the participants from his/her agency and any unique approaches he/she was trying. Teachers would also share stories about specific learners who showed particular aptitude or those having unusual problems. The second agenda item would focus on the progress toward solving ongoing system problems; typically, updates on discussions with either Bell Atlantic, IMSATT, Control Data, or the telephone and software companies. The third agenda item focused on developing skills, understanding the system and helping teachers build their capacity to accomplish what they wanted. The final item typically centered on concerns about assessment.

The following details the topics covered in the teacher trainings. Immediately following the narrative, outlines for each training session are provided. All handouts are included as attachments to this report.

Training 1, October 27, 1992, Drexel University: Teachers received an initial group training at Drexel. A computer-based presentation explained the logging-on process. This presentation also displayed and explained sample screens from the courseware.

It was decided that since the computers would not be delivered until late November, further trainings would wait until sites received the computers. Without hands-on practice to complement the theory, retention was unlikely. Teachers made appointments (most of the agencies sent at least two representatives to the training) to come to Drexel between November 25 and December 3 for individual two-hour trainings.

Training 2, Nov. 25-Dec. 3, 1992, Drexel University: Participants worked on the computer one-on-one with Drexel staff to log on. (See Attachment 3, **Example of Logon**.) Each teacher received two system names, one so that they could register as teacher/administrators (who had a wide variety of options in the CYBIS system, including moving around among lessons, seeing and printing learner records, and altering curriculum structure) and a second so that they could register as learners and "take" courses in the same way a learner would. They took several lessons to see how the courseware worked. They were encouraged to explore the available teacher options, which included the ability to look at the on-line catalog of courseware available on CYBIS (not just the ABE courseware). They were asked to try to log on as soon as possible so that the instruction they received would be fresh to them, to note any questions or problems they had, to call Drexel for needed support over the telephone, and to return for each monthly training.

Training 3, January 29, 1993, Mayor's Commission on Literacy: (See Attachment 3, **The Real Launch of IMSATT**). This was a discussion and demonstration training, rather than a hands-on training. Logon procedures were reviewed. Each learner needed to have a specially prepared disk to use the system. Drexel staff prepared the first versions of the disks and gave them to the teachers. However, because the logon would frequently change, it was viewed as impractical to convey every disk back to Drexel, so the teachers needed training in how to create different logons. Example sheets and step-by-step directions were given so that teachers could understand and use the *Access* menu to change and update their learners' logons. After this training, all of the teachers were successful when it proved necessary to modify these logons. In fact, they were even able to train learners to do it, or talk them through it over the phone.

The ability to look at student records and the ability to communicate using personal notes was also explained and discussed. Handouts supplemented the directions within the CYBIS Training Manual.

Training 4, Feb. 18, 1993, Mayor's Commission on Literacy: A discussion and demonstration training review the newest logon and discussed other problems. The group was given handouts and discussed how to view learner results, individually and as a group. Responses from teachers indicated that though they were able to see some records of both their students and their group, they were not able to find other kinds of data (such as how much time each learner spent in each unit, or how far along in each unit they were). This information was conveyed to Control Data, which was able to create an appropriate structure for looking at these records.

How to communicate with users currently on line (called "Term-talk" in the CYBIS terminology), and communications procedures using the "drexcdsi" file, an on-line bulletin board where learners and teachers could utilize the note-writing and communications features of the program, were explained (See Attachment 3, Teacher's Meeting, Feb. 18, 1993). The CYBIS P-note (personal notes, a kind of electronic mail) feature was discussed and recommended.

A demonstration of how to access the supplementary courseware (educational games) was made.

A regular rotation of teachers was established so that there would be a teacher available to help on-line learners each night (See Attachment 2, Instructors' On-Call Schedule.)

Training 5, March 18, 1993, Mayor's Commission on Literacy: Communication, including Term-talk, Term-ask, Monitoring, and P-notes were reviewed. Monitoring allows teachers (from their computer) to observe the actions of the learners (at their computer). Techniques for exempting learners from a course were taught. (See Atachment 3, Exempting Learners). The procedures needed to look at the data teachers were interested in had been developed by Control Data since the previous meeting and these were taught.

Different options available to instructors, such as enrolling new learners, changing learners' routing through the courseware, and sending messages to all members of a group, were explained and handouts were distributed.

Training 6, April 21, 1993, Mayor's Commission on Literacy: A discussion session reviewing many of the above techniques and introducing the newest logon procedure. By this point, most teachers were able to either accomplish what they needed by themselves, and were able to analyze errors which stemmed from learner, teacher, telephone, or CYBIS, or knew how to describe it and get it accomplished through Drexel, IMSATT, or Control Data.

TEACHER TRAINING MEETING #1

AGENDA

I. What is courseware?

II. What is telecommunications?

III. What is IMSATT?

IV. Potential advantages and drawbacks to an on-line educational system

V. The Basics of CYBIS

  A. Accessing the system: logging on

  B. Available courseware

    1. The content of CYBIS: Curriculum, course, module, lesson

    2. The structure of CYBIS: Assessment, Training, Post-assessment, Remediation or advancement

  C. Electronic mail and bulletin boards

VI. HyperCard Presentation on Using CYBIS

VII. Set up rotation to make sure there is one teacher on each night learners might log on

VIII. Set up appointments for individual trainings

TEACHER TRAINING MEETING #2 (INDIVIDUAL TRAINING)

AGENDA

I. Review Previous Training

II. Give out teacher logons

III. Log on and explore teacher menus

  A. How to access the courseware catalog

  B. Electronic mail

  C. Viewing learner records

IV. Log on and explore learner menus

  A. Courseware

    1. Integrated Learning System sequenced courseware

    2. Additional courseware: Games and unsequenced educational software

  B. Learner Email

V. Take an assessment and explore a lesson

VI. Give out suggested teacher and learner logs

VII. Explain support system.

VIII. Questions and answers.

TEACHER TRAINING MEETING #3

AGENDA

I. Introductions and overall comments on how the project is going

  A. How are the machines working?

  B. How is the courseware working for your group?

II. Logon problems

  A. Adjusting the logon for teachers who have call waiting.

  B. Teacher questions and comments on the logon process

III. Viewing learners' results:

  A. Viewing data from the entire group

  B. Viewing data from individuals

  C. Viewing the work of learners currently on-line.

IV. Communications using the bulletin board

  A. Notes to and with learners

  B. Teacher notes

V. Questions and Answers

TEACHER TRAINING MEETING #4

AGENDA

I. Review and discuss positive and negative experiences

II. Review and discuss any alterations in the logon, system, or record-keeping which have occurred since the inception of the project, including implementation of additional courseware.

III. Review examining learner results

IV. On-Line Communication

  A. Term-Talk

  B. Term-Ask

  C. Term-Comment

  D. Bulletin Board

  E. Student Monitoring

IV. Review of logs and record-keeping

V. Questions and Answers

TEACHER TRAINING MEETING #5

AGENDA

I. Review and discuss positive and negative experiences

II. Review and discuss any alterations in the logon, system, or record-keeping which have occurred since the inception of the project, including implementation of additional courseware.

III. Review examining learner results

IV. On-Line Communication

   A. Term-Talk

   B. Term-Ask

   C. Term-Comment

   D. Bulletin Board

   E. Student Monitoring

IV. Review of logs and record-keeping

V. Questions and Answers

CONCLUSIONS ABOUT TEACHER TRAINING

The teachers involved into the project had different levels of expertise with computers, courseware, and telecommunications. The teachers from Community Women's Education Project and Lutheran Settlement House Women's Program had worked extensively with all three components. The teacher from Drexel and one of the teachers from Temple (both of whom left before the completion of the project) had a more than introductory, but not in-depth, experience with all three components. The teachers from the Indochinese American Council and ASPIRA Inc. of Southeastern Pennsylvania, and the assistant teacher at Center for Literacy, were familiar with computers but not courseware or telecommunications. Both coordinators from the YMCA were familiar with computers, but the skill levels of volunteers who actually worked with the learners were minimal.

The first lessons involved simply logging on to the system and creating a password. At the beginning of the project, all functions, such as adding, dropping, exempting students from courses, or communicating with Control Data, were carried out by Drexel staff. After training, the teachers could accomplish these functions as well as communicate with learners, send and receive messages to the system administrators from Control Data, monitor students as they worked in real time, and access student records.

In general, the teachers who had the opportunity to log on had little trouble with the procedures as written. However, several pointed out that there was a twelve-step procedure necessary to log on, and indicated that this was likely to be difficult for many of the learners. (See section on Logon Concerns.) This was the first time the logon was revised and was an example of how valuable it is to have feedback from the teachers to best support the learners. If the issues or problems raised by teacher or learner feedback seemed likely to affect many of the learners, resolutions to these problems were then incorporated into trainings. Questions about logons were a part of every monthly training since they changed so often.

The monthly training regimen was a successful and valuable way to train the teachers. It encouraged them to be in control of and understand the CYBIS system, to actively question and explore the options available in the program, and to logically try to deduce answers to questions rather than rely on an "omniscient" lab administrator. This training enabled these teachers to be confident, alert consumers of technology rather than passive recipients.

This was a valuable holistic learning experience for the teachers. However, learners might have completed more lessons with less interference from the system with a highly trained lab administrator supervising from a single site. Agencies which replicate this project should evaluate whether the long-term benefits received from increasing teacher awareness of technology are as valuable as greater usage during an initial six-month, rather than two-week, training period.

Control Data offered excellent support in providing these materials, and went "the extra mile" by providing the Quick Start Guide on disk, so that appropriate adaptations could be made. Unfortunately, as is often the case with computer manuals, the Delivery Guide was difficult to follow, contained outdated (and sometimes incorrect) information, or did not clearly indicate what actions to follow. While Drexel staff or project teachers were sometimes able to use the manual, more often they needed to refer questions directly to Control Data. Project teachers called Drexel staff for help, and if necessary, Drexel staff would call Control Data, Bell Atlantic, or IMSATT staff for a higher level of support.

PLP was empowering to teachers and helped convey expertise and promote familiarity with computer and networking concepts to the teachers. It also provided teachers time to use the product in a real situation, making their learning relevant to their needs. Nevertheless, it did mean that teachers were unable to utilize certain powerful features of the system until quite late into the process, simply because training time (approximately two hours per month) was limited. While this meant that training took place incrementally over a six month period, it also meant that teachers became invested in the project and took a great deal of personal responsibility (and pride) in mastering aspects of CYBIS.

Nevertheless, in replicating the project, it is recommended that more time for training should be allocated before and during the project. Such training would certainly encourage more understanding and use of the many aspects of the CYBIS system sooner.

Based on the Power Learning Project experience the following steps are recommended when training teachers to use on-line CAI:

- Teacher training should incorporate hands-on work as much as possible.
- In introducing the project, teachers with some previous familiarity with computers and software should be tapped to help design and deliver the training as much as possible.
- Teachers should have between one and two months to log on and experience the system themselves before incorporating it into their classes so they will know what is available and be able to plan how to best integrate it into their instructional program.
- Teacher training should be implemented over time to allow the teachers to build their proficiency with tasks before moving on. Early training sessions should occur at one central site, later sessions should include some remote activities.
- The entire software documentation manuals should be provided for teachers at the first training so that they are encouraged to explore the system on their own.
- Teacher training must be offered for the length of the project to ensure that teacher, and learner, feedback are constantly used to improve the implementation of the system.
- Trainers should be able to make themselves available in-person or on-line during the evening or at times when teachers will need help, at least during the beginning phases of the project.

SECTION 4:
THIRD-PARTY IMPACT EVALUATION

Prepared by Jay Sivin-Kachala,
Interactive Educational System Design, Inc.

Evaluation Planning

In this chapter, the plan for the Impact Analysis Evaluation is described in detail. The plan was developed by IESD, the project's independent Impact Analysis evaluator, to answer the following questions:

> Does home-based CAI, coupled with classroom learning, result in achievement in reading, writing, and mathematics skills?
>
> Are specific patterns of home-based CAI usage related to specific areas of achievement.
>
> Does home-based CAI, coupled with classroom learning, result in increased student motivation and more positive attitudes toward learning.
>
> Does home-based CAI, coupled with classroom learning, result in increased student self-esteem.

Plan in Brief

The evaluation combined pre-test/post-test comparisons of standardized test performance with analysis of more subjective, teacher and student assessments of achievement and the value of home-based CAI.[2]

For the pre-test/post-test comparisons, the sign test, a nonparametric statistical test, was used because of the small student groups in each adult education class. For purposes of statistical analysis, students were grouped in two ways: (1) by adult education program, and (2) by initial reading ability, as determined by performance on the standardized reading pre-test. Achievement data were compared with CYBIS usage data provided by Control Data Systems to determine if any achievement effects were likely attributable to home-based CAI.

Finally, an informal comparison of retention rate data (the experimental group compared to a control group or the "typical" rate) was planned.

Preliminary Data Collection

Before beginning the evaluation (December 1992), IESD met with representatives of the Mayor's Commission on Literacy and the participating adult literacy education programs. The purposes of this meeting were:

- To learn as much as possible about the differences among the programs involved in the project.
- To present evaluation issues and options, and to gain the input of the participants.

---

[2] The evaluation plan originally called for comparison between experimental and control groups from the participating adult education programs. However, suitable control groups were unavailable.

As a follow-up to this meeting, representatives of the eight participating adult literacy education programs were asked to provide detailed information about their programs in written form. Their responses were analyzed by IESD.

Testing Instruments

To assess achievement in reading and mathematics, the *Test of Adult Basic Education (TABE) Survey Form, Locator Test and Level E, M, or D* (CTB MacMillan McGraw-Hill) was administered as a pre- and post-test. To assess achievement in writing, essay tests were administered as a pre- and post-test, using topics provided by the GED Testing Service. Each test consisted of two essays, which were scored by an independent agency trained in the holistic scoring technique used by the GED Testing Service.

In addition to these formal assessment tools, IESD constructed survey instruments to capture teacher and student perceptions of achievement. Teachers were asked to identify specific concepts and skills that were covered in class and to rate student achievement in each, using a 5-point Likert scale. Teachers were also asked to identify positive and negative changes in student performance that they attributed to use of computers at home. Students were asked to assign themselves improvement ratings for reading, writing, and mathematics, using a 3-point Likert scale, and to indicate what they thought were the causes of their improvement (e.g., adult education classes, using the computer at home, other factors).[3] Students were also asked to identify their personal learning goals, to assign themselves improvement ratings for these goals (using the same 3-point Likert scale), and to indicate what they thought were the causes of their improvement.

Retention rate data (available for two adult education programs) served as a measure of student motivation to build literacy skills.

In addition, the *Survey of Study Habits and Attitudes, Form C* (The Psychological Corporation) was administered as a pre- and post-test to assess changes in attitudes toward learning. This multiple-item paper-pencil test assesses two areas of study habits (delay avoidance and work methods) and two areas of study attitudes (teacher approval and education acceptance).

Finally, to assess changes in student self-esteem, the *Culture-Free Self-Esteem Inventories for Children and Adults, Form AD* (Pro-Ed) was administered as a pre- and post-test. This multiple-item paper-pencil test assesses four areas of self-esteem: general, social (relating to others), personal (inner feelings), and defensiveness.

Statistical Analysis

Because group sizes smaller than 12 were anticipated (due to students dropping out or not completing pre- and post-testing), the sign test, a nonparametric statistical test, was used. The sign test gets its name from the fact that it is based upon the direction of differences between two measures rather than quantitative measures of data. It is particularly useful for research in which quantitative measurement is impossible or infeasible, but it is possible to determine, for each pair of observations, which is the "greater" (in some sense).

---

[3] Adapted from a method described in D. D'Amico-Samuels, *Perspectives on Assessment from the New York City Adult Literacy Initiative: A Critical Issues Paper* (New York: Literacy Assistance Center, November 1991).

The sign test is applicable to the case of two related samples when the experimenter wishes to establish that two conditions are different. The only assumption underlying this test is that the variable under consideration has a continuous distribution. The test does not make any assumptions about the form of the distribution of differences nor does it assume that all subjects are drawn from the same population (thus the name *nonparametric*). The different pairs may be from different populations with respect to age, sex, intelligence, etc. The only requirement is that within each pair, the experimenter has achieved matching with respect to the relevant variables. One way to accomplish this is to use each subject as its own control.

The null hypothesis (no change) tested by the sign test is that $P(+) = P(-) = .5$; ties are not taken into account. The power efficiency of this test is about 95% for $N = 6$, but it declines as the size of the sample increases to an eventual (asymptotic) efficiency of 63%. The sign test serves as a useful substitute for the t-test when working with small sample sizes.[4]

Additional Data Collection

Control Data Systems provided IESD with summary usage and curriculum mastery data for all work completed by students on the home computers. The data were sorted by adult education program and by initial reading ability group. Control Data also provided IESD with summary teacher usage data. These data were used to determine whether achievement effects were attributable to use of the CYBIS system.

Drexel University, in its capacity as the project's process evaluator, provided data and observations about the teachers involved in the project.

Analysis of Teacher and Student Data

Finally, the data collected from the teacher and student survey instruments were analyzed to identify specific areas of achievement related to the instructional objectives of each adult literacy education program and to the personal learning goals of students. As part of this analysis, we compared for selected students the data collected from the teachers and students to usage and mastery data for all work completed by students on the home computers. We looked for patterns of achievement related to the use of the home computers.

---

[4] Adapted from Sidney Siegel and N. John Castellan, Jr., *Nonparametric Statistics For The Behavioral Sciences*, Second Edition (New York: McGraw-Hill Book Company, 1988).

Observations and Outcomes

Findings and analysis related to achievement in reading, writing, mathematics, study habits and attitudes, and self-esteem are based on data from four adult education programs[5]:

LSH
CFL
Community Women's Education Project
YMCA

Achievement Gains

Achievement gains were analyzed by adult education program and by initial (pre-test) reading level.

Achievement by adult education program. Table 1 indicates that the only significant difference demonstrated by students at LSH was for the TABE Math subtest. There is a clear direction towards improvement of scores, as indicated by the predominant number of + signs ($p = .05$). The average gain was 1.25 grade levels. Analysis for the GED Essay Writing test could not be conducted because only one essay was completed during post-testing. (GED's requirements are that scoring be based on an average of two essay samples from each student.)

---

[5] The data provided by the other adult education programs were insufficient to complete the analysis.

Table 1. Achievement at Lutheran Settlement House

TABE		S-EST	S-HBTS		
R	M		SA	SH	SO
+	+	-	-	-	-
+	+	-	+	+	+
+	+	-	+	0	+
-	+	+	+	-	+
-	+	-	-	-	-
-	+	-	+	-	-
+	+	+	+	+	+
-	-	-	-	-	-
-	+	+	+	-	-
-	-	+	-	+	+

N	10	10	10	10	9	10
X	4	2	4	4	3	5
p	.4	.05	.4	.4	.5	.6

N: Number of pairs - number of ties (shown as zeros)
X: Number of fewer signs

Table 2 suggests an improvement among students at CWEP for GED Essay Writing (p = .03) and for Self-Esteem. Although the p value for Self-Esteem is 0.06 (marginally over the level of significance 0.05), it may be an indication that for a larger N this pattern of improvement will hold. Testing for the TABE Math was not completed.

Table 2. Achievement at Community Women's Education Project

TABE		GED	S-EST	S-HBTS		
R	M	Essay		SA	SH	SO
+		+	+	+	+	-
+		+	+	-	+	-
-		+	+	-	+	-
+		+	+	0	-	-
+		0	0	+	+	+
+		+		+	-	+

N	6		5	4	5	6	6
X	1		0	0	2	2	2
p	.11		.03	.06	.5	.3	.3

N: Number of pairs - number of ties (shown as zeros)
X: Number of fewer signs

Table 3 indicates no significant changes for students at the CFL program. Note that for the GED Essay Writing and Study Habits tests, this may be due to the low number of students who completed testing.

Table 3. Achievement at Center for Literacy

TABE		GED	S-EST	S-HBTS		
R	M	Essay		SA	SH	SO
+	+	+	-	-	+	-
+	-	+	-	-	-	-
-	-		-	+	+	+
+	-		+			
+	-		-			
-	+					
+	-					
+						

N	8	7	2	5	3	3	3
X	2	2	0	1	1	1	1
p	.2	.2	*	.2	*	*	*

N: Number of pairs - number of ties (shown as zeros)
X: Number of fewer signs
* = N is too low to yield a p value

According to Table 4, TABE Reading shows significant positive change for students at the YMCA program (p = .02). The average gain was 0.8 grade levels. Students in this program did not demonstrate a significant change for any other test.

Table 4. Achievement at YMCA

	TABE		GED	S-EST	S-HBTS		
	R	M	Essay		SA	SH	SO
	+	+	0	+	-	+	+
	+	+	-	+	+	+	+
	+	+	+	-	+	+	+
	+	-	+	-	+	+	+
	+	-		-	+	+	+
	0	+		+	-	+	-
	+	-		+	-	-	-
	+	+		+	-	-	-
	+	+		-	-	-	-
	+	+			-	-	-
N	9	10	3	9	10	10	6
X	0	3	1	4	5	4	5
p	.02	.2	*	.5	.6	.4	.6

N: Number of pairs - number of ties (shown as zeros)
X: Number of fewer signs
* = N is too low to yield a p value

Achievement by initial reading level. Table 5 indicates that the only significant difference demonstrated by students with an initial reading level of less than grade 5.0 was for TABE Reading (p = .001).

Table 5. Achievement for Students with Initial Reading Level < Grade 5.0

	TABE		GED	S-EST	S-HBTS		
	R	M	Essay		SA	SH	SO
	+			-	-	+	-
	+	+					
	-	-	+	-	-	-	-
	+	-		-	+	+	+
	+	-	+	+			
	-	-					
	+	+					
	+	-		-			
	+	+	0	+	-	+	-
	+	+		+	+	+	+
	+	+	-	-	+	+	+
	+	-			+	+	+
	+	-	+	-	+	+	+
	0	+	+	-	-	+	+
	+	+		+	-	-	-
	+	+		+	-	-	-
	+	+		+	-	-	-
	+	+		-	-	-	-
	+	+		+	+	+	+
N	18	18	5	15	14	14	14
X	2	7	1	7	6	5	7
p	.001	.2	.2	.5	.4	.2	.6

N: Number of pairs - number of ties (shown as zeros)
X: Number of fewer signs

Table 6 indicates no significant changes for students with an initial reading level between grade 5.0 and grade 8.0. Note that for GED Essay Writing, this may be due to the low number of students who completed testing.

Table 6. Achievement for Students with Grade 5.0 ≤ Reading Level ≤ 8.0

TABE		GED	S-EST	S-HBTS		
R	M	Essay		SA	SH	SO
+		+				
+				-	+	-
-		+	+	-	+	-
+		+	0	+	+	+
+	+		-	-	-	-
+	+		-	+	+	+
+	+		-	+	0	+
-	+		+	+	-	+
-	-		-	-	-	-
-	+		+	+	-	-
-	-		+	-	+	+

N	11	7	3	8	10	10	10
X	5	2	0	4	5	4	5
p	.5	.3	*	.6	.6	.4	.6

N: Number of pairs - number of ties (shown as zeros)
X: Number of fewer signs
* = N is too low to yield a p value

Table 7 indicates no significant changes for students with an initial reading level greater than grade 8.0. This may be due to the low sample sizes.

Table 8. Achievement for Students with Reading Level > Grade 8.0

TABE		GED	S-EST	S-HBTS		
R	M	Essay		SA	SH	SO
+			+	+	-	-
+		+	+	0	-	-
+		0	+	+	+	+
-	+	+	-	-	-	-
-	+		-	+	-	-

N	5	2	2	5	4	5	5
X	2	0	0	2	1	1	1
p	.5	*	*	.5	.3	.2	.2

N: Number of pairs - number of ties (shown as zeros)
X: Number of fewer signs
* = N is too low to yield a p value

Summary of findings. Significant positive effects were specific to particular adult education programs and initial reading levels. These effects are summarized as follows:

TABE Reading	YMCA Initial Reading Level < Grade 5
TABE Math	LSH
GED Essay Writing	Community Women's Education Project
Self-Esteem	Community Women's Education Project (marginally significant)

No significant effects with respect to study habits or attitudes were found for any group.

Comparison to CYBIS Usage Data

The finding of significant positive effects does not indicate whether CYBIS home-based CAI was a factor in these effects. To explore the relationship between CYBIS usage and achievement effects, CYBIS usage and mastery data were analyzed by adult education program and by initial reading level.

CYBIS usage and mastery by adult education program. Table 8 summarizes usage and mastery data for the four adult education programs included in the evaluation.

Table 8. CYBIS Home-Based CAI Usage and Mastery Sorted by Adult Education Program

			Lang. Arts & Writing Courses 11 Courses Est. Comp.: 122 Hrs		Math Courses 19 Courses Est. Comp.: 150 Hrs		Reading Courses 15 Courses Est. Comp.: 222 Hrs		Grand Total 44 Courses Est. Comp.: 494 Hrs	
Student	Site	Level	Hours in Course	Courses Mastered	Hours in Course	Courses Mastered	Hours in Course	Courses Mastered	Total Hours	Total Courses Mastered
Lutheran Settlement House										
amil, norma	2	2	13.2	1.00	28.9	0.54	0.0	0.00	42.1	1.54
colon, lucy	2	2		0.00	24.4	1.13	10.4	2.00	34.8	3.13
dumpson, jackie	2	2	9.5	0.07	5.7	0.17	0.5	0.00	15.7	0.24
gray, demarisol	2	2	19.1	3.44	23.9	1.25	0.8	0.13	43.8	4.82
johnson, elsie	2	3	.2	0.00	2.6	0.17	0.3	0.00	3.1	0.17
mcintyre, cheryl	2	3	7.3	1.73	18.6	1.75	3.5	0.00	29.4	3.48
metzcher, lillian	2	1	16.1	0.45	48.6	2.39	54.3	6.07	119.0	8.91
swisher, joyce	2	2	8.2	0.68	12.9	3.00	0.1	0.00	21.2	3.68
torres, cheryl	2	2	1.3	0.00	57.1	9.00	1.6	0.25	60.0	9.25
watson, agnes	2	2	3.7	0.07	6.7	1.00	0.5	0.00	10.9	1.07
TOTAL			**78.6**	**7.44**	**229.40**	**20.40**	**72.0**	**8.45**	**380.0**	**36.29**
Average Hours			**7.86**		**22.94**		**7.2**		**38.0**	
Center for Literacy										
blakeney, mattie	4	1	1.1	0.00	5.3	0.00	0.0	0.00	6.4	0.00
burris, chester	4	1	0.9	0.00	0.0	0.00	7.7	0.13	8.6	0.13
fisher, linda	4	1	0.0	0.00	1.2	0.00	0.1	0.00	1.3	0.00
foster, lois	4	1	0.0	0.00	0.2	0.00	0.0	0.00	0.2	0.00
johnson, mary	4	1	3.1	0.07	1.7	0.25	2.7	0.07	7.5	0.39
nesmith, carrie	4	1	0.0	0.00	3.7	0.00	2.4	0.00	6.1	0.00
perez, william	4	1	0.1	0.00	3.3	0.00	0.1	0.00	3.5	0.00
perkins, lorenzo	4	1	0.0	0.00	1.2	0.00	1.6	0.00	2.8	0.00
TOTAL			**5.2**	**0.07**	**16.6**	**0.25**	**14.6**	**0.20**	**36.4**	**.52**
Average Hours			**.65**		**0.50**		**1.83**		**2.98**	

BEST COPY AVAILABLE

Table 8. CYBIS Home-Based CAI Usage and Mastery Sorted by Adult Education Program (continued)

CWEP										
bielawski, carol	8	3	22.5	4.29	1.00	0.00	0.0	0.00	23.5	4.29
burnett, vanessa	8	2	34.5	1.24	7.1	1.40	14.6	2.07	56.2	4.71
byrd, michele	8	3	3.0	0.00	0.00	0.00	0.8	0.00	3.8	0.00
enoch, venus	8	2	1.7	0.13	0.00	0.00	10.2	2.48	11.9	2.61
freeman, cheryl	8	2	3.2	0.00	0.00	0.00	0.2	0.00	3.4	0.00
legare, shawn	8	3	33.3	5.00	0.2	0.00	0.0	0.00	33.5	5.00
ward, suzanne	8	2	27.7	1.89	0.6	0.00	10.5	1.07	38.8	2.96
TOTAL			**125.9**	**12.55**	**8.9**	**1.4**	**36.3**	**5.62**	**171.1**	**19.57**
Average Hours			**17.99**		**1.27**		**5.19**		**24.45**	
YMCA										
crawley, frank	3a	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
gore, howard	3a	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
hines, linda	3a	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
mason, jerome	3a	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
mcintosh, juliette	3a	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
parker, eddie	3a	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
collins, thomas	3b	1	0.0	0.00	0.0	0.00	0.1	0.00	0.1	0.00
mcsorley, john	3b	1	84.7	6.00	16.1	6.25	131.9	11.00	232.7	23.25
orsini, joan	3b	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
thaller, hanna	3b	1	0.4	0.07	0.0	0.00	0.6	0.00	1.0	0.07
TOTAL			**85.1**	**6.07**	**16.1**	**6.25**	**132.6**	**11.00**	**233.8**	**23.32**
Average Hours			**8.51**		**1.61**		**13.26**		**25.8**	

LSH students had the greatest average usage of the CYBIS system (38.0 hours) and the greatest average total courses mastered (3.6). They worked on Mathematics courses more than any other curriculum area (60 percent of the time) and mastered more Mathematics courses than any other subject (56 percent of the courses mastered). Sixty percent of the students (6 of 10) used Mathematics courseware for more than 18 hours. Using the sign test, TABE Math showed a significant positive effect for these six students ($p = .016$). All six students had score increases on the TABE Math from pre- to post-test. Their average gain was 2.3 grade levels. These data suggest that use of the CYBIS system in combination with classroom instruction may have been a factor in the class's achievement in Mathematics.

The students at CWEP averaged 24.45 hours of system usage and mastered an average of 2.8 courses per student. They worked on Language Arts and Writing more than any other curriculum area (75 percent of the time) and mastered more Language Arts and Writing courses than any other subject (64 percent of the courses mastered). More than half of the students (4 of 7) used Language Arts and Writing courseware for more than 20 hours. Three of these four students showed an increase on GED Essay Writing from pre- to post-test; the fourth student showed no change[6]. These data suggest that use of the CYBIS system in combination with classroom instruction may have been a factor in the class's achievement in Writing.

The vast majority of students at YMCA never used the CYBIS system (80 percent). Because most students never used the CAI, it is highly unlikely that it was a major factor in the class's achievement in Reading.

CYBIS usage and mastery by initial reading level. Table 9 summarizes usage and mastery data for three initial reading level groups.

---

[6] These results were not statistically significant, probably due to the small group size.

Table 9. CYBIS Home-Based CAI Usage and Mastery
Sorted by Initial Reading Level (TABE)

			Lang. Arts & Writing Courses 11 Courses Est. Comp.: 122 Hrs		Math Courses 19 Courses Est. Comp.: 150 Hrs		Reading Courses 15 Courses Est. Comp.: 222 Hrs		Grand Total 44 Courses Est. Comp.: 494 Hrs	
Student	**Site**	**Level**	**Hours in Course**	**Courses Mastered**	**Hours in Course**	**Courses Mastered**	**Hours in Course**	**Courses Mastered**	**Total Hours**	**Total Courses Mastered**
Below 5th Grade Reading Level										
burris, chester	4	1	0.9	0.00	0.0	0.00	7.7	0.13	8.6	0.13
collins, thomas	3b	1	0.0	0.00	0.0	0.00	0.1	0.00	0.1	0.00
crawley, frank	3a	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
fisher, linda	4	1	0.0	0.00	1.2	0.00	0.1	0.00	1.3	0.00
foster, lois	4	1	0.0	0.00	0.2	0.00	0.0	0.00	0.2	0.00
gore, howard	3a	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
hines, linda	3a	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
johnson, mary	4	1	3.1	0.07	1.7	0.25	2.7	0.07	7.5	0.39
mason, jerome	3a	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
mcintosh, juliette	3a	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
mcsorley, john	3b	1	84.7	6.00	16.1	6.25	131.9	11.00	232.7	23.25
metzcher, lillian	2	1	16.1	0.45	48.6	2.39	54.3	6.07	119.0	8.91
nesmith, carrie	4	1	0.0	0.00	3.7	0.00	2.4	0.00	6.1	0.00
orsini, joan	3b	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
parker, eddie	3a	1	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00
perez, william	4	1	0.1	0.00	3.3	0.00	0.1	0.00	3.5	0.00
perkins, lorenzo	4	1	0.0	0.00	1.2	0.00	1.6	0.00	2.8	0.00
thaller, hanna	3b	1	0.4	0.07	0.0	0.00	0.6	0.00	1.0	0.07
TOTAL			**106.4**	**6.59**	**81.3**	**8.89**	**201.5**	**17.27**	**389.2**	**32.75**
Average Hours			**5.6**		**4.28**		**10.6**		**20.48**	

Table 9. CYBIS Home-Based CAI Usage and Mastery
Sorted by Initial Reading Level (TABE) (continued)

5th to 8th Grade Reading Level										
amil, norma	2	2	13.2	1.00	28.9	0.54	0.0	0.00	42.1	1.54
burnett, vanessa	8	2	34.5	1.24	7.1	1.40	14.6	2.07	56.2	4.71
colon, lucy	2	2	0.0	0.00	24.4	1.13	10.4	2.00	34.8	3.13
dumpson, jackie	2	2	9.5	0.07	5.7	0.17	0.5	0.00	15.7	0.24
enoch, venus	8	2	1.7	0.13	0.0	0.00	10.2	2.48	11.9	2.61
freeman, cheryl	8	2	3.2	0.00	0.0	0.00	0.2	0.00	3.4	0.00
gray, demarisol	2	2	19.1	3.44	23.9	1.25	0.8	0.13	43.8	4.82
swisher, joyce	2	2	8.2	0.68	12.9	3.00	0.1	0.00	21.2	3.68
torres, cheryl	2	2	1.3	0.00	57.1	9.00	1.6	0.25	60.0	9.25
watson, agnes	2	2	3.7	0.07	6.7	1.00	0.5	0.00	10.9	1.07
ward, suzanne	8	2	27.7	1.89	0.6	0.00	10.5	1.07	38.8	2.96
TOTAL			**122.1**	**8.52**	**167.3**	**17.49**	**49.4**	**8.0**	**338.8**	**34.01**
Average Hours			**11.1**		**15.2**		**4.49**		**30.8**	
Above 8th Grade Reading Level										
bielawski, carol	8	3	22.5	4.29	1.0	0.00	0.0	0.00	23.5	4.29
byrd, michele	8	3	3.0	0.00	0.0	0.00	0.8	0.00	3.8	0.00
johnson, elsie	2	3	0.2	0.00	2.6	0.17	0.3	0.00	3.1	0.17
legare, shawn	8	3	33.3	5.00	0.2	0.00	0.0	0.00	33.5	5.00
mcintyre, cheryl	2	3	7.3	1.73	18.6	1.75	3.5	0.00	29.4	3.48
TOTAL			**66.3**	**11.02**	**22.4**	**1.92**	**4.6**	**0.00**	**93.3**	**12.94**
Average Hours			**13.26**		**4.48**		**.92**		**18.7**	

The vast majority of students with an initial reading level of less than Grade 5 used the CYBIS system for less than one hour or not at all (83 percent). Thus, it is highly unlikely that home-based CAI was a major factor in this group's achievement in Reading.

Summary. CYBIS usage and mastery data suggest that the availability of home-based CAI in combination with classroom instruction may have been an important factor in Mathematics achievement for students at the LSH and in Writing achievement for students at CWEP. It is unlikely that the availability of home-based CAI in combination with classroom instruction was a major factor in Reading achievement for students at YMCA or for students with a reading level below Grade 5.

Explaining Different Results at Different Programs

What might explain the positive results in Mathematics at the LSH and in Writing for students at CWEP? IESD analysts considered the following:

- The amount of computer training received by students
- Teacher use of the CYBIS system
- Teacher expertise with online technology
- Integration of home-based CAI and classroom instruction

In addition to these conditions, CYBIS usage data confirm that the system is much better suited to students with reading levels between Grades 5 and 8 than to students with reading levels below Grade 5. The experience of YMCA and CFL was that most students below grade 5 will not use CYBIS because they do not have the prerequisite reading ability to benefit from the courseware. Another integrated learning system with courseware specifically designed for beginning readers (e.g., with human speech) would be better suited for these students.

Computer training received by students. Each adult education program reported the number of hours of training on the computer that students received after initial training. These are summarized in Table 10 below.

Table 10. Computer Training Received by Students After Initial Training

Adult Education Program	Hours of Training
Lutheran Settlement House	10
Center for Literacy	5
Community Women's Education Project	17-20
YMCA	1-2

These data suggest that the amount of student computer training may have been a factor in the positive results at LSH and CWEP.

Teacher use of the CYBIS system. Control Data Systems tracked the number of hours teachers used CYBIS to explore courseware. These data are summarized in Table 11.

Table 11. Hours Spent by Teachers Exploring CYBIS Courseware

Adult Education Program	Lang. Arts & Writing	Math	Reading	Total
Lutheran Settlement House	0.3	2.9	3.0	6.2
Center for Literacy	1.8	4.1	3.1	9.0
Community Women's Education Project	2.8	0.0	0.0	2.8
YMCA	0.0	0.0	0.1	0.1

Teachers at CFL spent the most time of any program exploring Mathematics and Reading courseware. However, no significant achievement effects were found at CFL. The one additional hour spent by teachers at CWEP compared to teachers at CFL does not seem sufficient to explain why achievement in Writing occurred at CWEP but not at CFL. In general, the amount of time spent by teachers reviewing CYBIS courseware does not appear to be a factor in the different results at the different adult education programs.

Teacher expertise with online technology. According to Drexel University process evaluators, teachers at LSH and CWEP had prior expertise with online technology in instructional settings. The teachers at CFL and YMCA had no such prior expertise. This may have been a major factor in the different results at the various programs.

Integration of home-based CAI and classroom instruction. Drexel University process evaluators report that at LSH and CWEP, a teacher was also the site manager of the CYBIS system. There was an ongoing attempt to integrate courseware assignments with classroom instruction. At CFL a teacher was not the site manager of CYBIS; there was little or no integration of CAI assignments and classroom instruction. At YMCA, students worked with volunteer tutors rather than professional teachers; there was little or no integration of CAI assignments and tutorial instruction. The degree of integration between classroom instruction and courseware assignment is likely to have been a major factor in the success at LSH and CWEP.

Summary. Important contributing factors in the achievement gains at LSH and CWEP are likely to include the amount of computer training received by students, the teachers' prior expertise with online technology, and their efforts to integrate home-based CAI and classroom instruction.

Impacts at LSH and CWEP from the Teachers' Viewpoint

Standardized testing is not the only means of determining impacts of an instructional treatment. Teachers at LSH and CWEP were asked for their own, subjective assessments.

LSH. Regarding Mathematics and the use of computers at home, one teacher commented:

> *Using the computer at home enhanced student self confidence, therefore, enabling the student to feel confidence about his/her studies as well.. .When a learner is given a chance to accomplish something that is scary to them they feel good about tackling other challenges as well -- even those they have failed at previously.*

In addition to the online courseware, students at LSH also had access to word processing software. One teacher noted:

> *Using the computer to do word processing gave the students the ability to write and edit more efficiently. Therefore, it helped them to concentrate on content.....When a tool eases the writing process, the learner can then concentrate on what they want to say and not on spelling errors and the like. It helped them to edit too.*

When asked about overall benefits of having students use computers at home, one teacher responded:

> *First, it helped them to get familiar with the world of technology -- a frightening thing for most students. Second, it introduced learners to a new method of learning -- one that was never failed by them before.*

Teachers at LSH reported some initial technical problems with the computers which were eventually solved. No negative effects of students using computers were noted.

CWEP. Regarding Writing and the use of computers at home, one teacher commented:

> *They began to pay attention to sentence structure and spelling rules....The computer lessons encouraged good grammar and the spelling section repeated the rules, allowing the students to become familiar with the reasoning behind what they needed to learn.*

With respect to Reading, one teacher noted:

> *They began to concentrate on reading for content....The students had to concentrate very hard to decipher what was expected of them in the various lessons. They needed good reading comprehension to grasp directions.*

When asked about overall benefits of having students use computers at home, one teacher responded:

> *Each student was able to do the lessons at a time convenient to them. Also, they each felt special to have an important piece of technology in their homes, and this feeling made them want to learn.*

Teachers at CWEP also reported some technical problems with the computers, especially with the keyboards. No negative effects of students using computers were noted.

General Observations and Conclusions

Given the limitations of a study in natural educational settings and with small sample sizes, there is evidence to suggest that home-based CAI delivered online in combination with classroom instruction can have a positive effect on academic achievement. The following conditions appear to contribute to the success of this treatment.

- Students must receive sufficient computer training to work through the management system and courseware without difficulty.
- Teachers must have sufficient prior experience with online educational technology. Technology-experienced teachers will be prepared solve any problems that might arise. They will also convey to their students an attitude of positive expectations about using the computers.
- Teachers must integrate courseware selection with classroom instruction. To accomplish this, teachers must be trained in technology integration.

There is limited statistical evidence (from CWEP) that the instructional treatment can have a positive effect on self-esteem. Teacher logs and interviews with students at all the programs suggest that self-esteem was improved as a result of using computers at home. At LSH, it is possible that for some students, aspects of self-esteem specifically related to learning may have increased without affecting general self-esteem. (Note that the self-esteem scale used for analysis measures general self-esteem and not self-esteem specifically related to learning and school.) At CFL and YMCA, usage of the CYBIS was so low that the question of its impact on self-esteem is moot.
Furthermore, the retention data from LSH suggests that the treatment can have a positive effect on stuent motivation. It seems likely that these effects are the result of a combination computer and classroom interaction.

No statistical evidence was found that home-based computer use combined with classroom instruction has an impact on study habits and attitudes. In planning this evaluation, it was an open question as to whether the habit of using computers at home for educational purposes would have a positive impact on study attitudes and habits. Perhaps study skills must become a focus of classroom instruction for study habits and attitudes to improve. It may also be that there must be a teacher presence during the home study experience. The CYBIS system's online e-mail system has great potential for developing such a teacher presence. This would a require a structure for teacher-student e-mail communication about assignments and study plans. The e-mail communication would have to be a regular part of both the teachers' and students' responsibilities.

All in all, there is sufficient data to support continuing this instructional treatment in educational settings where the conditions identified above can be met.

Problems with Student Populations and Data Collection

The evaluation plan called for data collection from eight adult education programs:

LSH
CFL
CWEP
YMCA
Indo-Chinese American Council (ICAC)
Aspira, Inc.
Drexel University
Temple University

All students were supposed to have an initial reading level between Grade 5 and Grade 8. However, three of the adult education programs included students with reading levels well below Grade 5 (CFL, YMCA, and Aspira[7]). And one program included mostly students with reading levels above Grade 8 (Drexel). Further complicating the original intents of the project and the evaluation, two of the programs involved classes of English as a Second Language (ESL) students.

Nonetheless, the testing instruments were determined to be suitable for the broad range of students to be included in the project.

Completion of testing varied from program to program. The table below summarizes the completion data for each program.

---

[7] Initial reading levels for ICAC students were never submitted. However, these students are reported to have had initial reading levels below Grade 5, as well.

Students Completing Evaluation Instruments

Program	TABE	GED Essay	Self-Esteem	Study Habits	Teacher Ass'mnt	Student Ass'mnt
LSH	Pre-test: 12 Post-test: 10	Pre-test: 10 Post-test: 9[a]	Pre-test: 10 Post-test: 10	Pre-test: 10 Post-test: 10	Pre-test: 11 Post-test: 0	Pre-test: 11 Post-test: 0
CFL	Pre-test: 13 Post-test: 8[b]	Pre-test: 12[c] Post-test: 5[d]	Pre-test: 9 Post-test: 5 No test: 1	Pre-test: 8 Post-test: 3 No test: 2	Pre-test: 11 Post-test: 5	Pre-test: 4 Post-test: 7
CWEP	Pre-test: 9[e] Post-test: 7[e]	Pre-test: 9 Post-test: 6	Pre-test: 5 Post-test: 5 No test: 4	Pre-test: 9 Post-test: 6	Pre-test: 9 Post-test: 0	Pre-test: 7 Post-test: 0
YMCA	Pre-test: 10 Post-test: 10	Pre-test: 6[f] Post-test: 4	Pre-test: 5 Post-test: 5	Pre-test: 9 Post-test: 6	Pre-test: 9 Post-test: 0	Pre-test: 7 Post-test: 0
ICAC	No test: 9	Pre-test: 9[g] Post-test: 0	Pre-test: 9 Post-test: 9	No test: 9	Pre-test: 9 Post-test: 0	Pre-test: 4 Post-test: 0
Aspira	Pre-test: 8 Post-test: 0 No test: 1	Pre-test: 8 Post-test: 0 No test: 1	Pre-test: 9 Post-test: 0	No test: 9	Pre-test: 8 Post-test: 0 No test: 1	No test: 9
Drexel	Pre-test: 7 Post-test: 0 No test: 3	Pre-test: 4[h] Post-test: 0 No test: 6	Pre-test: 6 Post-test: 0 No test: 4	Pre-test: 8 No test: 2	Pre-test: 10 Post-test: 0	No test: 10
Temple	Pre-test: 13 Post-test: 0	Pre-test: 4[i] Post-test: 0	Pre-test: 12 Post-test: 0	Pre-test: 7 Post-test: 0	Pre-test: 13 Post-test: 0	Pre-test: 6 Post-test: 0

[a] All 9 students completed only one of two required essays. Completion of two essays is required for purposes of evaluation.

[b] All 8 students completed the Reading sub-test. Only 7 students completed the Mathematics sub-test.

[c] 1 of the 12 students completed only one of two required essays. Completion of two essays is required for purposes of evaluation.

[d] 3 of the 5 students completed only one of two required essays. Completion of two essays is required for purposes of evaluation.

[e] All students completed only the Reading sub-test.

[f] 2 of the 4 students completed only one of two required essays. Completion of two essays is required for purposes of evaluation.

[g] 2 of the 9 students completed only one of two required essays. Completion of two essays is required for purposes of evaluation.

[h] 1 of the 4 students completed only one of two required essays. Completion of two essays is required for purposes of evaluation.

[i] 2 of the 4 students completed only one of two required essays. Completion of two essays is required for purposes of evaluation.

The low completion rate for Aspira and ICAC may be partially explained by the fact that these were ESL classes. Other achievement instruments may be better suited for the ESL student population.

The low completion rate for the Teacher Assessment instrument may be due to the length of the instrument. (A simpler, shorter assessment instrument had been considered and rejected by the Philadelphia Mayor's Commission on Literacy.)

For some programs, incomplete testing was probably due to teacher resistance to standardized testing or to testing in general. In some instances, incomplete testing may be due to student absences during critical testing periods.

ATTACHMENT 1:
POST-PROJECT TEACHER INTERVIEWS

Post-Power-Learning Project Teacher Interview

Interviewee: Terry Martell

Date of Interview: 6/9/93

Have you encouraged your learners to keep a log? ● Yes ○ No ○ N/A

Have you kept a log? ○ Yes ○ No ● Sometimes

Make Log Comments on page 2

How many students did you start out with? 12

How many students are now in the program? 10

How many students benefitted from the program? 10

What presented difficulties for your learners?	**Which one was the worst?**
☒ Hardware	○ Hardware
☒ Phone Problems (static, call waiting, etc.)	○ Phone Problems (static, call waiting, etc.)
☒ Telecommunications Software	○ Telecommunications Software
☐ Educational Software	○ Educational Software
☒ Management System Problems	○ Management System Problems
☒ Log-on Process	● Log-on Process
☐ Macintosh Interface	○ Macintosh Interface
☐ IBM Interface	○ IBM Interface
☐ Support from Teacher	○ Support from Teacher
☐ Support from MCOL	○ Support from MCOL
☐ Motivation	○ Motivation
☐ Household Distractions	○ Household Distractions
☒ Pre/Post Project Testing Procedures	○ Pre/Post Project Testing Procedures

What presented difficulties for you?

☐ Hardware
☒ Phone Problems (static, call waiting, etc.)
☒ Telecommunications Software
☐ Ed. Software (technically, does it work?)
☐ Content of Software
☒ Management System Problems
☒ Pre/Post Project Testing Procedures
☒ Log-on Process
☐ Macintosh Interface
☐ IBM Interface
☐ Support from Organization
☐ Support from Drexel
☒ Support from MCOL
☐ Motivation
☒ Lack of Time/Money
☐ Lack of a computer at home

What presented the worst difficulty for you?

○ Hardware
○ Phone Problems (static, call waiting, etc.)
○ Telecommunications Software
○ Ed. Software (technically, does it work?)
○ Content of Software
○ Management System Problems
○ Pre/Post Project Testing Procedure
● Log-on Process
○ Macintosh Interface
○ IBM Interface
○ Support from Organization
○ Support from Drexel
○ Support from MCOL
○ Motivation
○ Lack of Time/Money
○ Lack of a computer at home

How did you choose your participants?

☐ Years in the Program
☐ Personal Acquaintence
☐ Perceived Motivation
☐ Previous Computer Experience
☐ Random
☐ Eligible for DPA
☐ Grade level
☒ N/A

Would you do this project again? ● Yes ○ No

Were your expectations of the project met? ○ Yes ● No

What would you do differently?

The testing was rediculous; spend more time for student training; spend more time on curricular review (would have looked at curriculum more thoroughly with more time.) Would have preferred students at a higher grade level because of software readability. On an administrative level, there should have been more time built in for teacher training before working with learners. As trainers, Ben and Terry should have had more training themselves.

Post-Power-Learning Project Teacher Interview

Comment about learner logs:

Students with low writing skills are not easily encouraged to write on a regular basis. When they do write, it is sometimes difficult to understand their meaning as well as their handwriting. I believe the learners did not understand the log sheet and/or exactly what the questions refered to, even after reviewing the sheet in class. I think they wanted to write, but had low skills so that terminology (such as "on-line") may have been unclear to them, even after reviewing these terms in class.

Comment about teacher logs:

It is difficult to maintain the log on a regular basis due to lack of time, availability of the log itself (electronic version), and the fact that frequently problems occur as I'm in the middle of other things, they are resolved one way or another, and it would mean stopping everything just to open the log and record. Trying to remember at a later date is futile too, because it was difficult keeping track of what was a Drexel responsibility as opposed to an LSH responsibility.

Why did your students drop?

One student dropped because she had to take a second job. The other dropped because she moved out of the state.

Why did your other students stay in?

Combination of them already being motivated students, holding a class in addition to their working at home was useful, most of them were attending an additional class during the day – organiztional support was there for them. They had a lot of contact with the organization aside from their class through extra-curricular activities.

Post-Power-Learning Project Teacher Interview

In what ways did students benefit from the program?

By learning not to fear using technology. By exploring alternative ways of learning which they haven't already failed at one time in their life. By learning to trust their own instincts withthe technology and beginning to identify problems through the process of elimination. By taking responsibility for their own learning. By including family members in the learning process. By experiencing much more self-esteem and confidence in themselves.

In what ways did students not benefit from the program?

They weren't given enough time to explore their full potential with the project, 6 months wasn't enough time to accomplish much toward their education when learning technology had to take the forefront of this project.

Do your students feel the project is successful? Why?

Not exactly sure, even through all their frustrations and saying, "I keep doing the same lesson over and over again..." I'm not even sure they did "progress" toward their GED goals, but they may have. Even if they didn't, they know that they've learned other things which they feel are very important and which have upgraded their self-esteem and their confidence. I don't think they would have termed it as successful, but possibly they would have said "worthwhile", they would definitely had continued to participate longer if given the chance and eventually sugnificant progress would have been noticable.

Do you feel the project is successful? Why

The more ways available for students to learn, the better. If one way doesn't work try the other, and this is one alternative which will work for some students, possibly those students who have continually failed the "traditional way". In addition, I think it's another way for students to connect with family members (sharing computers in their homes). Students who are parents are already aggrevated and/or embarrassed because their kids are doing work in schools that they never had, including computers, and parents like to feel that they know a little about what their kids know about and work with in school.

Post-Power-Learning Project Teacher Interview

Interviewee: Ben Burenstein

Date of Interview: 1/25/94

Have you encouraged your learners to keep a log? ○ Yes ○ No ● N/A

Have you kept a log? ○ Yes ○ No ● Sometimes

Make Log Comments on page 2

How many students did you start out with? 0

How many students are now in the program? 0

How many students benefitted from the program? 0

What presented difficulties for your learners?	Which one was the worst?
☐ Hardware	○ Hardware
☐ Phone Problems (static, call waiting, etc.)	○ Phone Problems (static, call waiting, etc.)
☐ Telecommunications Software	○ Telecommunications Software
☐ Educational Software	○ Educational Software
☐ Management System Problems	○ Management System Problems
☐ Log-on Process	○ Log-on Process
☐ Macintosh Interface	○ Macintosh Interface
☐ IBM Interface	○ IBM Interface
☐ Support from Teacher	○ Support from Teacher
☐ Support from MCOL	○ Support from MCOL
☐ Motivation	○ Motivation
☐ Household Distractions	○ Household Distractions
☐ Pre/Post Project Testing Procedures	○ Pre/Post Project Testing Procedures

What presented difficulties for you?

- ☐ Hardware
- ☒ Phone Problems (static, call waiting, etc.)
- ☒ Telecommunications Software
- ☒ Ed. Software (technically, does it work?)
- ☐ Content of Software
- ☒ Management System Problems
- ☐ Pre/Post Project Testing Procedures
- ☒ Log-on Process
- ☐ Macintosh Interface
- ☒ IBM Interface
- ☒ Support from Organization
- ☒ Support from Drexel
- ☒ Support from MCOL
- ☐ Motivation
- ☒ Lack of Time/Money
- ☐ Lack of a computer at home

What presented the worst difficulty for you?

- ○ Hardware
- ○ Phone Problems (static, call waiting, etc.)
- ● Telecommunications Software
- ○ Ed. Software (technically, does it work?)
- ○ Content of Software
- ○ Management System Problems
- ○ Pre/Post Project Testing Procedure
- ○ Log-on Process
- ○ Macintosh Interface
- ○ IBM Interface
- ○ Support from Organization
- ○ Support from Drexel
- ○ Support from MCOL
- ○ Motivation
- ○ Lack of Time/Money
- ○ Lack of a computer at home

How did you choose your participants?

- ☐ Years in the Program
- ☐ Personal Acquaintence
- ☐ Perceived Motivation
- ☐ Previous Computer Experience
- ☐ Random
- ☐ Eligible for DPA
- ☐ Grade level
- ☒ N/A

Would you do this project again? ● Yes ○ No

Were your expectations of the project met? ● Yes ○ No

What would you do differently?

More training up-front, more time setting up log-in proceedures on both systems, faster telecommunications, more frequent staff meetings.

Post-Power-Learning Project Teacher Interview

Comment about learner logs:

N/A

Comment about teacher logs:

Very difficult to maintain due to lack of time.

Why did your students drop?

N/A

Why did your other students stay in?

N/A

Post-Power-Learning Project Teacher Interview

In what ways did students benefit from the program?

In what ways did students not benefit from the program?

Do your students feel the project is successful?   Why?

Do you feel the project is successful?   Why

Post-Power-Learning Project Teacher Interview

Interviewee: John Houghton

Date of Interview: 6/15/93

Have you encouraged your learners to keep a log? ● Yes ○ No ○ N/A

Have you kept a log? ● Yes ○ No ○ Sometimes

Make Log Comments on page 2

How many students did you start out with? 11

How many students are now in the program? 11

How many students benefitted from the program? 12

What presented difficulties for your learners?	Which one was the worst?
☒ Hardware	○ Hardware
☒ Phone Problems (static, call waiting, etc.)	○ Phone Problems (static, call waiting, etc.)
☐ Telecommunications Software	○ Telecommunications Software
☒ Educational Software	● Educational Software
☐ Management System Problems	○ Management System Problems
☒ Log-on Process	○ Log-on Process
☐ Macintosh Interface	○ Macintosh Interface
☐ IBM Interface	○ IBM Interface
☐ Support from Teacher	○ Support from Teacher
☐ Support from MCOL	○ Support from MCOL
☐ Motivation	○ Motivation
☒ Household Distractions	○ Household Distractions
☒ Pre/Post Project Testing Procedures	○ Pre/Post Project Testing Procedures

What presented difficulties for you?

- ☐ Hardware
- ☒ Phone Problems (static, call waiting, etc.)
- ☐ Telecommunications Software
- ☐ Ed. Software (technically, does it work?)
- ☐ Content of Software
- ☐ Management System Problems
- ☒ Pre/Post Project Testing Procedures
- ☐ Log-on Process
- ☐ Macintosh Interface
- ☐ IBM Interface
- ☒ Support from Organization
- ☐ Support from Drexel
- ☐ Support from MCOL
- ☒ Motivation
- ☐ Lack of Time/Money
- ☐ Lack of a computer at home

What presented the worst difficulty for you?

- ○ Hardware
- ○ Phone Problems (static, call waiting, etc.)
- ○ Telecommunications Software
- ○ Ed. Software (technically, does it work?)
- ○ Content of Software
- ○ Management System Problems
- ○ Pre/Post Project Testing Procedure
- ○ Log-on Process
- ○ Macintosh Interface
- ○ IBM Interface
- ● Support from Organization
- ○ Support from Drexel
- ○ Support from MCOL
- ○ Motivation
- ○ Lack of Time/Money
- ○ Lack of a computer at home

How did you choose your participants?

- ☒ Years in the Program
- ☒ Personal Acquaintence
- ☒ Perceived Motivation
- ☐ Previous Computer Experience
- ☐ Random
- ☐ Eligible for DPA
- ☐ Grade level
- ☐ N/A

Would you do this project again? ● Yes ○ No

Were your expectations of the project met? ● Yes ○ No

What would you do differently?

Became less motivated over time. Would select a different level of learner, set aside a time when everyone was on the system, tie courseware into curriculum explicitly.

BEST COPY AVAILABLE

Post-Power-Learning Project Teacher Interview

Comment about learner logs:

Hasn't really worked. Initially asked them to do it on their own, tried to do it as part of scheduled class, mixed as to whether they would actually write about computer or something else, turned into mishmash, didn't happen. Erratic responses. Still ask them, nothing written about computer for 3 weeks or a month. Would include one line in a paragraph on a computer. Also, weekly survey has replaced any writing. They are filling out the forms. To be honest, it has become a confrontational situation. No instantaneous payoff, became more like ordering them to do something, or we'd have to move them. Tense atmosphere about computer, rest of class fine and dandy.

Comment about teacher logs:

Yes, been helpful, takes a lot of time (do it after every class or if anyone calls you, remember details of conversation). At first did it on monthly basis, Donna said do it more often, pretty detailed events and observaitons. Changed view, more like Anita, more not force them to do it.

Why did your students drop?

We lost 2 and added 3. One was to the extended family and lack of time on phone, other was woman who didn't have time.

Why did your other students stay in?

We're not forcing them to do much. Some still sense a commitment.

Post-Power-Learning Project Teacher Interview

In what ways did students benefit from the program?

Most, educationally. they liked it. I don't think it undermined their self esteem, even though they couldn't get on the system. Self esteem, or confidence. They didn't blame themselves. They blamed the technology. They do this with math too.

In what ways did students not benefit from the program?

Educationally, not many. Emotionally, yes. Two of the 5 people, one was a great user in March, but couldn't reserve phone time after that. The other was on many hours, but her father had a stroke ans she hasn't been to class. They were the strongest users. Three others benefitted from it more than just coming to class. One definitely benefitted because he stopped coming in March, picked up a temp job, so wasn't working.

Do your students feel the project is successful? Why?

Just in the sense of experiencing a computer. If you asked them about the system, they would say no because they can't really use it in a meaningful way. They seem really proud they have it. A couple use ClarisWorks. One called today about typing something for a lawyer.

Do you feel the project is successful? Why

No, based on testing the system, it was unsuccessful with our learners.

Post-Power-Learning Project Teacher Interview

Interviewee: Sam Keo

Date of Interview: 11/1/93

Have you encouraged your learners to keep a log? ● Yes ○ No ○ N/A

Have you kept a log? ● Yes ○ No ○ Sometimes

Make Log Comments on page 2

How many students did you start out with? 15

How many students are now in the program? 1

How many students benefitted from the program? 9

What presented difficulties for your learners?	**Which one was the worst?**
☐ Hardware	○ Hardware
☒ Phone Problems (static, call waiting, etc.)	○ Phone Problems (static, call waiting, etc.)
☒ Telecommunications Software	○ Telecommunications Software
☐ Educational Software	○ Educational Software
☒ Management System Problems	○ Management System Problems
☐ Log-on Process	○ Log-on Process
☐ Macintosh Interface	○ Macintosh Interface
☐ IBM Interface	○ IBM Interface
☐ Support from Teacher	○ Support from Teacher
☐ Support from MCOL	○ Support from MCOL
☐ Motivation	○ Motivation
☐ Household Distractions	○ Household Distractions
☒ Pre/Post Project Testing Procedures	● Pre/Post Project Testing Procedures

What presented difficulties for you?

- ☐ Hardware
- ☒ Phone Problems (static, call waiting, etc.)
- ☒ Telecommunications Software
- ☐ Ed. Software (technically, does it work?)
- ☐ Content of Software
- ☐ Management System Problems
- ☒ Pre/Post Project Testing Procedures
- ☐ Log-on Process
- ☐ Macintosh Interface
- ☐ IBM Interface
- ☐ Support from Organization
- ☐ Support from Drexel
- ☐ Support from MCOL
- ☐ Motivation
- ☒ Lack of Time/Money
- ☐ Lack of a computer at home

What presented the worst difficulty for you?

- ○ Hardware
- ○ Phone Problems (static, call waiting, etc.)
- ○ Telecommunications Software
- ○ Ed. Software (technically, does it work?)
- ○ Content of Software
- ○ Management System Problems
- ● Pre/Post Project Testing Procedure
- ○ Log-on Process
- ○ Macintosh Interface
- ○ IBM Interface
- ○ Support from Organization
- ○ Support from Drexel
- ○ Support from MCOL
- ○ Motivation
- ○ Lack of Time/Money
- ○ Lack of a computer at home

How did you choose your participants?

- ☒ Years in the Program
- ☐ Personal Acquaintence
- ☐ Perceived Motivation
- ☐ Previous Computer Experience
- ☐ Random
- ☒ Eligible for DPA
- ☐ Grade level
- ☐ N/A

Would you do this project again? ● Yes ○ No

Were your expectations of the project met? ● Yes ○ No

What would you do differently?

Would use 1 student per computer. Would use Mac screen. Wouldn't test so much, too much pressure—fear of failure. Welfare sent 2 parents to study , if they fail, they don't get good job. They have 6 kids. Revise the directions, make them more simple, there are a lot of symbols. More control over the lessons. Maybe next time we'll do better. Did use e-mail. Telephone line worked ok. People got frustrated going from system to system.

Post-Power-Learning Project Teacher Interview

Comment about learner logs:

I collected most of the logs and gave them to Jean Spriggs. The same question. Did not ask what lesson student studied. Most students used picture english. 1 student (TESOL Test)

Comment about teacher logs:

I worked most off the lesson. Technical problems were ik. I could get through without any problem. I did nost of the lessons and would have liked it.

Why did your students drop?

Two completely dropped—One student's English was not good enough to log on. The second didn't like to work with the computer because the letters were too small -- vision problems. Everyone else stayed in.

Why did your other students stay in?

Sometimes asked them to work, to try. They said it's very difficult, but they tried. Others never worked with a computer before or had one at home. Excited. ClarisWorks-they had copies to Type!. ONe said his son used it a lot. Another used it more than logging on. Was seperate, not really integrated. Used it as a supplement. If students wanted to learn something, I would have to provide it. Not the best—2 students with 1 computer. Prefer to have one per family.

Post-Power-Learning Project Teacher Interview

In what ways did students benefit from the program?

Didn't have to come to school to study. Caould study anytime as long as they wanted. Don't know if they felt better about themselves.

In what ways did students not benefit from the program?

None

Do your students feel the project is successful? Why?

Yes, one of our best students is still using the computer. The others are those who took the TESOL test at Temple. Most students are parents, they still use Type! and games. More comfortable with other computer (IBM). Even I didn't have experience using a Mac, but I learned from this project, especially typing.

Do you feel the project is successful? Why

For me, absolutely. form this project the best is that I learned how to use the computer. The English is very difficult, most times I played games. I tought my son how to use the computer and to play games. I did it for volunteer. Really enjoyed it. We needed more time. Nest time, I'm sure I could be very successful. Now we know how to pick the students who will be more successful and not just learn in the last 2 months how to really use the computer. There's not much software for ESL. We should add more. Most students are still comming here.

Post-Power-Learning Project Teacher Interview

Interviewee: Scot Mentzer

Date of Interview: 1/26/94

Have you encouraged your learners to keep a log? ● Yes ○ No ○ N/A

Have you kept a log? ○ Yes ○ No ● Sometimes

Make Log Comments on page 2

How many students did you start out with? 6

How many students are now in the program? 3

How many students benefitted from the program? 5

What presented difficulties for your learners?

- ☐ Hardware
- ☒ Phone Problems (static, call waiting, etc.)
- ☒ Telecommunications Software
- ☐ Educational Software
- ☒ Management System Problems
- ☒ Log-on Process
- ☐ Macintosh Interface
- ☐ IBM Interface
- ☐ Support from Teacher
- ☐ Support from MCOL
- ☐ Motivation
- ☐ Household Distractions
- ☒ Pre/Post Project Testing Procedures

Which one was the worst?

- ○ Hardware
- ○ Phone Problems (static, call waiting, etc.)
- ● Telecommunications Software
- ○ Educational Software
- ○ Management System Problems
- ○ Log-on Process
- ○ Macintosh Interface
- ○ IBM Interface
- ○ Support from Teacher
- ○ Support from MCOL
- ○ Motivation
- ○ Household Distractions
- ○ Pre/Post Project Testing Procedures

What presented difficulties for you?

- ☐ Hardware
- ☒ Phone Problems (static, call waiting, etc.)
- ☒ Telecommunications Software
- ☐ Ed. Software (technically, does it work?)
- ☐ Content of Software
- ☐ Management System Problems
- ☐ Pre/Post Project Testing Procedures
- ☒ Log-on Process
- ☐ Macintosh Interface
- ☐ IBM Interface
- ☐ Support from Organization
- ☐ Support from Drexel
- ☐ Support from MCOL
- ☐ Motivation
- ☒ Lack of Time/Money
- ☐ Lack of a computer at home

What presented the worst difficulty for you?

- ○ Hardware
- ○ Phone Problems (static, call waiting, etc.)
- ○ Telecommunications Software
- ○ Ed. Software (technically, does it work?)
- ○ Content of Software
- ○ Management System Problems
- ○ Pre/Post Project Testing Procedure
- ○ Log-on Process
- ○ Macintosh Interface
- ○ IBM Interface
- ○ Support from Organization
- ○ Support from Drexel
- ○ Support from MCOL
- ○ Motivation
- ● Lack of Time/Money
- ○ Lack of a computer at home

How did you choose your participants?

- ☐ Years in the Program
- ☒ Personal Acquaintence
- ☒ Perceived Motivation
- ☐ Previous Computer Experience
- ☐ Random
- ☐ Eligible for DPA
- ☒ Grade level
- ☐ N/A

Would you do this project again? ● Yes ○ No

Were your expectations of the project met? ● Yes ○ No

What would you do differently?

Would have a class one day a week to discuss their problems. All learners would be required to be logged on at least one day a wk at the same time. Would choose a higher level learner (ged). Would request more money for better telecommunication software and equipment (modems).

Post-Power-Learning Project Teacher Interview

Comment about learner logs:

Had trouble getting learners to do logs. Would have been better is the log was part of the on-line process, like an automatic screen would appear during the log-off process. Logs help me gain feedback from learners about project. But by the time I read them, it was too late to act upon the information.

Comment about teacher logs:

It was a nuicence because of time and then if you put it off, you would either forget what you wanted to remark about or would forget to do it altogether.

Why did your students drop?

Preceived lack of time to participate. Intimidation of the computer because of hardware and software malfunctions and telecommunication problems. Also, everyday responsibilities of life (moving, etc...).

Why did your other students stay in?

Motivation to improve their skills. Status of having computer at home. Having assistance at home, someone willing to help log on and answer question about software and procedure.

Post-Power-Learning Project Teacher Interview

In what ways did students benefit from the program?

Confidence level in using technology rose. Typing skills improved. Problem-solving skills improved-dealing with malfunctions. Learning to understand that they weren't at fault when malfunctions occurred. Some reading and writing benefits were evident.

In what ways did students not benefit from the program?

nothing.

Do your students feel the project is successful? Why?

Yes, because they were able to have computer at home, and they learned "something" and the ability to deal with using computers.

Do you feel the project is successful? Why

Yes, we learned a lot from the successes and the unsuccesses of each site and we learned to work together on a collaborationg project which was beneficial. In addition, we were updated in technology and hardware and software uses.

Post-Power-Learning Project Teacher Interview

Interviewee: Meg Keeley

Date of Interview: 1/28/94

Have you encouraged your learners to keep a log? ● Yes ○ No ○ N/A

Have you kept a log? ○ Yes ● No ○ Sometimes

Make Log Comments on page 2

How many students did you start out with? 12

How many students are now in the program? 10

How many students benefitted from the program? 10

What presented difficulties for your learners?	**Which one was the worst?**
☒ Hardware	○ Hardware
☒ Phone Problems (static, call waiting, etc.)	○ Phone Problems (static, call waiting, etc.)
☒ Telecommunications Software	○ Telecommunications Software
☒ Educational Software	● Educational Software
☐ Management System Problems	○ Management System Problems
☒ Log-on Process	○ Log-on Process
☐ Macintosh Interface	○ Macintosh Interface
☐ IBM Interface	○ IBM Interface
☐ Support from Teacher	○ Support from Teacher
☐ Support from MCOL	○ Support from MCOL
☐ Motivation	○ Motivation
☒ Household Distractions	○ Household Distractions
☒ Pre/Post Project Testing Procedures	○ Pre/Post Project Testing Procedures

What presented difficulties for you?

☒ Hardware
☐ Phone Problems (static, call waiting, etc.)
☐ Telecommunications Software
☐ Ed. Software (technically, does it work?)
☐ Content of Software
☐ Management System Problems
☒ Pre/Post Project Testing Procedures
☐ Log-on Process
☐ Macintosh Interface
☐ IBM Interface
☐ Support from Organization
☐ Support from Drexel
☐ Support from MCOL
☐ Motivation
☒ Lack of Time/Money
☐ Lack of a computer at home

What presented the worst difficulty for you?

● Hardware
○ Phone Problems (static, call waiting, etc.)
○ Telecommunications Software
○ Ed. Software (technically, does it work?)
○ Content of Software
○ Management System Problems
○ Pre/Post Project Testing Procedure
○ Log-on Process
○ Macintosh Interface
○ IBM Interface
○ Support from Organization
○ Support from Drexel
○ Support from MCOL
○ Motivation
○ Lack of Time/Money
○ Lack of a computer at home

How did you choose your participants?

☐ Years in the Program
☐ Personal Acquaintence
☒ Perceived Motivation
☐ Previous Computer Experience
☐ Random
☒ Eligible for DPA
☒ Grade level
☐ N/A

Would you do this project again? ● Yes ○ No

Were your expectations of the project met? ● Yes ○ No

What would you do differently?

Hardware would be more reliable. Software would be bug free. Implementation of program wasn't well thought out, as well as assessment of learners was too long and not valid. Assessment should have been built into the software.

Post-Power-Learning Project Teacher Interview

Comment about learner logs:

There should have been focus points at least once a month with focus questions so that if done in class we would have gotten more valuable feedback. Possibly a pre and post survey with focus sessions in between.

Comment about teacher logs:

N/A

Why did your students drop?

One student lacked commitment and had life interferences. The other was not enthusiastic and had personal problems with residence.

Why did your other students stay in?

Not because it was easy! They recognized the importance of learning to use the computer. Their self-esteem was being enhanced by being a part of the project and by overcoming problems related to the use of the computer. They were able to see progress taking place on a regular basis with their own learning. They were having fun. The group as a whole worked together and built camaraderie. Having pen pals on the pnote system.

Post-Power-Learning Project Teacher Interview

In what ways did students benefit from the program?

Increased their learning and self-esteem, built a technology foundation, learned how to work as a group and to enhance problem solving skills.

In what ways did students not benefit from the program?

Pre/post testing was useless. Studnet's frustration in working through hardware/software malfunctions. Software was glorified textbook content. While they were learning to use computers they weren't learning to use the newest in multimedia and interactive technology. A lot of the computer skills learned will not really be transferrable to daily computer use, too specific to the project. Some students were so frustrated with the hardware/software malfunctions that they resorted to just playing games.

Do your students feel the project is successful? Why?

Yes, they all wanted to keep the computers and continue with the project. But their idea of what it meant to be successful was not geared toward their own goals. They thought the project was successful because they knew they were logging in more than the other groups and that they were doing what the teachers and project managers were asking of them, using the computer a lot.

Do you feel the project is successful? Why

We knowingly used substandard equipment and software because we wanted to get computers into people's homes and this was the only way it was affordable. In that sense it was as successful as it could be since we couldn't really know in advance what malfunctions would occur. But the rise in student self-esteem was well worth the project because it set a strong foundation for their learning.

Post-Power-Learning Project Teacher Interview

Interviewee: Theressa McCormick

Date of Interview: 1/28/94

Have you encouraged your learners to keep a log? ● Yes ○ No ○ N/A

Have you kept a log? ○ Yes ○ No ● Sometimes

Make Log Comments on page 2

How many students did you start out with? 6

How many students are now in the program? 4

How many students benefitted from the program? 4

What presented difficulties for your learners?

- ☒ Hardware
- ☒ Phone Problems (static, call waiting, etc.)
- ☒ Telecommunications Software
- ☐ Educational Software
- ☐ Management System Problems
- ☒ Log-on Process
- ☐ Macintosh Interface
- ☐ IBM Interface
- ☐ Support from Teacher
- ☐ Support from MCOL
- ☐ Motivation
- ☐ Household Distractions
- ☐ Pre/Post Project Testing Procedures

Which one was the worst?

- ○ Hardware
- ○ Phone Problems (static, call waiting, etc.)
- ● Telecommunications Software
- ○ Educational Software
- ○ Management System Problems
- ○ Log-on Process
- ○ Macintosh Interface
- ○ IBM Interface
- ○ Support from Teacher
- ○ Support from MCOL
- ○ Motivation
- ○ Household Distractions
- ○ Pre/Post Project Testing Procedures

What presented difficulties for you?

- ☐ Hardware
- ☐ Phone Problems (static, call waiting, etc.)
- ☐ Telecommunications Software
- ☐ Ed. Software (technically, does it work?)
- ☐ Content of Software
- ☐ Management System Problems
- ☒ Pre/Post Project Testing Procedures
- ☐ Log-on Process
- ☐ Macintosh Interface
- ☐ IBM Interface
- ☐ Support from Organization
- ☐ Support from Drexel
- ☐ Support from MCOL
- ☐ Motivation
- ☒ Lack of Time/Money
- ☐ Lack of a computer at home

What presented the worst difficulty for you?

- ○ Hardware
- ○ Phone Problems (static, call waiting, etc.)
- ○ Telecommunications Software
- ○ Ed. Software (technically, does it work?)
- ○ Content of Software
- ○ Management System Problems
- ● Pre/Post Project Testing Procedure
- ○ Log-on Process
- ○ Macintosh Interface
- ○ IBM Interface
- ○ Support from Organization
- ○ Support from Drexel
- ○ Support from MCOL
- ○ Motivation
- ○ Lack of Time/Money
- ○ Lack of a computer at home

How did you choose your participants?

- ☒ Years in the Program
- ☐ Personal Acquaintence
- ☐ Perceived Motivation
- ☒ Previous Computer Experience
- ☐ Random
- ☐ Eligible for DPA
- ☒ Grade level
- ☐ N/A

Would you do this project again? ● Yes ○ No

Were your expectations of the project met? ● Yes ○ No

What would you do differently?

More preparation for staff to learn the system. No pre/post testing, or very little.

Post-Power-Learning Project Teacher Interview

Comment about learner logs:

Had difficulties getting them to complete logs. Feedback from learner's was pretty good once they remembered to complete log.

Comment about teacher logs:

I wish I would have had more time to devote to it. It was very difficult finding the time or remembering what I wanted to write once I had time.

Why did your students drop?

It was never clear as to why the 2 students dropped couldn't or wouldn't participate, may be a lack of motivaiton.

Why did your other students stay in?

They were excited and motivated about the computers. One student bought software to use at home. Thought they could get some marketable job skills as well as impove their learning. Also liked the idea that they could learn at home when they had time or just wanted to.

Post-Power-Learning Project Teacher Interview

In what ways did students benefit from the program?

Their writing and math skills improved some and just the knowledge of the computer. A marked improvement in their self-esteem was evident.

In what ways did students not benefit from the program?

None.

Do your students feel the project is successful? Why?

They wanted it to be longer, they felt cheated. Did allow some students to keep computer longer than project ran, but they didn't use the modem to access IMSATT.

Do you feel the project is successful? Why

Yes, we were able to put computers into student's homes.

Post-Power-Learning Project Teacher Interview

Interviewee: Donna Roush

Date of Interview: 1/28/94

Have you encouraged your learners to keep a log? ● Yes ○ No ○ N/A

Have you kept a log? ● Yes ○ No ○ Sometimes

Make Log Comments on page 2

How many students did you start out with? 12

How many students are now in the program? 10

How many students benefitted from the program? 10

What presented difficulties for your learners?

- ☒ Hardware
- ☒ Phone Problems (static, call waiting, etc.)
- ☒ Telecommunications Software
- ☒ Educational Software
- ☐ Management System Problems
- ☒ Log-on Process
- ☐ Macintosh Interface
- ☐ IBM Interface
- ☐ Support from Teacher
- ☐ Support from MCOL
- ☐ Motivation
- ☐ Household Distractions
- ☐ Pre/Post Project Testing Procedures

Which one was the worst?

- ○ Hardware
- ○ Phone Problems (static, call waiting, etc.)
- ● Telecommunications Software
- ○ Educational Software
- ○ Management System Problems
- ○ Log-on Process
- ○ Macintosh Interface
- ○ IBM Interface
- ○ Support from Teacher
- ○ Support from MCOL
- ○ Motivation
- ○ Household Distractions
- ○ Pre/Post Project Testing Procedures

What presented difficulties for you?

- ☒ Hardware
- ☐ Phone Problems (static, call waiting, etc.)
- ☒ Telecommunications Software
- ☒ Ed. Software (technically, does it work?)
- ☐ Content of Software
- ☐ Management System Problems
- ☒ Pre/Post Project Testing Procedures
- ☐ Log-on Process
- ☐ Macintosh Interface
- ☒ IBM Interface
- ☐ Support from Organization
- ☐ Support from Drexel
- ☐ Support from MCOL
- ☐ Motivation
- ☐ Lack of Time/Money
- ☐ Lack of a computer at home

What presented the worst difficulty for you?

- ○ Hardware
- ○ Phone Problems (static, call waiting, etc.)
- ● Telecommunications Software
- ○ Ed. Software (technically, does it work?)
- ○ Content of Software
- ○ Management System Problems
- ○ Pre/Post Project Testing Procedure
- ○ Log-on Process
- ○ Macintosh Interface
- ○ IBM Interface
- ○ Support from Organization
- ○ Support from Drexel
- ○ Support from MCOL
- ○ Motivation
- ○ Lack of Time/Money
- ○ Lack of a computer at home

How did you choose your participants?

- ☐ Years in the Program
- ☐ Personal Acquaintence
- ☒ Perceived Motivation
- ☐ Previous Computer Experience
- ☐ Random
- ☐ Eligible for DPA
- ☐ Grade level
- ☐ N/A

Would you do this project again? ● Yes ○ No

Were your expectations of the project met? ● Yes ○ No

What would you do differently?

Have a full day of training for teachers well in advance of working with learners including using the hardware/software at home. Much practice with logon techniques, and make logon proceedure transparent.

BEST COPY AVAILABLE

Post-Power-Learning Project Teacher Interview

Comment about learner logs:

There was a really nice shift because at first they blammed themselves, but then became more aware of software/hardware problems. Enhanced their problem solving skills and their self-esteem.

Comment about teacher logs:

It was a really great tool for assessment at the end of the project. I read parts of it at the graduation ceremony to show them how far they'd come.

Why did your students drop?

Personal reasons.

Why did your other students stay in?

Got very excited about the project once they saw it working. They started teaching each other and utilizing the pnote /term talk features.

Post-Power-Learning Project Teacher Interview

In what ways did students benefit from the program?

Their problem solving skills were sharpened, grammar improved through reinforcement, a great awareness toward spelling and accuracy was evident.

In what ways did students not benefit from the program?

Not having a printer was very disturbing-word processing was hindered.

Do your students feel the project is successful? Why?

Yes, they really liked being able to work at their convenience.

Do you feel the project is successful? Why

Yes, I thought it was successful in way I'd never imagined. The ability for learners to send me notes and my being able to answer them immediately was very beneficial.

ATTACHMENT 2:
FORMS

Evaluations
Data Collection
Student Agreement
Form Letters

CFSEI–2

Culture-Free
Self-Esteem
Inventories
Second Edition

FORM AD

Name ______________________ Age ______ Date ______________

Location ______________________ Date of Birth ______________

Examiner ______________________ Total ______ G ______ S ______ P ______ L ______

Directions

Please mark each question in the following way: If the question describes how you usually feel, make a check mark (√) in the "yes" column. If the question does not describe how you usually feel, make a check mark (√) in the "no" column. Check only one column (either yes or no) for each of the 40 questions. This is *not* a test, and there are no right or wrong answers.

© 1992, 1981 by PRO-ED, Inc.
2 3 4 5 94 93 92

Additional copies of this form (#5189) are available from PRO-ED,
8700 Shoal Creek Boulevard, Austin, TX 78758 USA 512/451-3246

Culture-Free Self-Esteem Inventories

Sample Survey Questions *

- Can you do most things as well as others?
- Do most people you know like you?
- Are you as intelligent as most people?
- Would you change many things about yourself if you could?
- Are you lacking in self-confidence?
- Is it difficult for you to express your views or feelings?
- Would you like to be as happy as others appear to be?
- Are you a failure?
- Do people like your ideas?
- Do most people respect your views?

* Contract limitations prohibit providing a full copy of the assessment.

Form C

GRADES 12-14

SSHA

Survey of Study Habits and Attitudes

Brown—Holtzman

Do not open this booklet until you are told to
do so. Wait for the examiner's instructions.

DO NOT MAKE ANY MARKS IN THIS BOOKLET

Copyright 1953, © 1965

All rights reserved. No part of this questionnaire may be reproduced in any form of printing or by any other means, electronic or mechanical, including, but not limited to, photocopying, audiovisual recording and transmission, and portrayal or duplication in any information storage and retrieval system, without permission in writing from the publisher.

THE PSYCHOLOGICAL CORPORATION
HARCOURT BRACE JOVANOVICH, INC.

Printed in U.S.A.

9-951005

DIRECTIONS

The purpose of this survey is to furnish an inventory of study habits and attitudes to serve as a foundation for self-improvement. If taken seriously, this inventory can help you obtain a better understanding of how to study properly. If you will honestly and thoughtfully mark all of the statements on the pages that follow, you will be able to learn many of your study faults. The value of this survey to you will be in direct proportion to the care with which you mark each statement. Since your answers will be treated with the strictest confidence, feel free to answer all questions frankly.

You will mark your answers on a separate answer sheet. Make no marks on this booklet. There are 100 statements in this questionnaire. For each statement a five-point scale is provided for indicating whether you rarely, sometimes, frequently, generally, or almost always do or feel as the statement suggests. You are to rate yourself on each statement by marking the space on your answer sheet that represents your answer choice. Thus, for example, you would mark space **R** on your answer sheet if you *rarely* follow the procedure described or if you feel that the statement is *rarely* true for you. In marking your answers, be sure that the number of the statement agrees with the number on the answer sheet. Make sure that your marks are heavy and black. Make no stray marks on the answer sheet and erase completely any mark that you wish to change.

To aid you in answering this questionnaire, the terms have been defined on a percentage basis as follows:

R - RARELY means from 0 to 15 per cent of the time.
S - SOMETIMES means from 16 to 35 per cent of the time.
F - FREQUENTLY means from 36 to 65 per cent of the time.
G - GENERALLY means from 66 to 85 per cent of the time.
A - ALMOST ALWAYS means from 86 to 100 per cent of the time.

Remember, you are asked to rate yourself, not in accordance with what you think you *should* do or feel, or as you think *others* might do or feel, but as you yourself are in the habit of doing and feeling. When you cannot answer a statement on the basis of actual experience, mark the statement according to what you would be most likely to do if the situation should arise.

There are no "right" or "wrong" answers to these statements, and there is no time limit for this questionnaire. Work as rapidly as you can without being careless, and do not spend too much time on any one statement. Please do not omit any of the statements.

Survey of Study Habits and Attitudes

Sample Survey Questions *

- When my assigned homework is extra long or unusually difficult, I either quit in disgust or study only the easier parts of the lesson.
- I feel that teachers lack understanding of the needs and interests of students.
- Even though I don't like a subject, I still work hard to make a good grade.
- I think that teachers like to exercise their authority too much.
- I hesitate to ask a teacher for further explanation of an assignment that is not clear to me.
- I feel that students are not given enough freedom in selecting their own topics for themes and reports.
- Telephone calls, people coming in and out of my room, "bull-sessions" with my friends, etc., interfere with my studying.
- In taking notes, I tend to take down material which later turns out to be unimportant.
- I put off writing themes, reports, term papers, etc., until the last minute.
- I think that teachers tend to talk too much.
- I believe that teachers tend to avoid discussing present-day issues and events with their classes.
- My studying is done in a random, unplanned manner-is impelled mostly by the demands of approaching classes.
- I believe that grades are based upon a student's ability to memorize facts rather than upon the ability to "think" through.

* Contract limitations prohibit providing a full copy of the assessment.

Student Reporting

Learners will be asked to keep a journal which would be provided to them. They would be asked to write an entry into the journal as often as they would like with a minimum of once per week (if they wanted to write after each on-line session, they would be able to).

The journal pages would contain the following areas for student reporting.

Date ________________

How long did you work on the computer? __________ hrs.

What did you work on? (check which one) On-line ______ Word Processing ______

Did you work alone on your work. Yes ____ No _____

Did you work with someone else Yes ____ No _____

Did any family members work on the computer? Yes ____ No _____

Did you have trouble at all with your work? Yes ____ No _____

Did you have trouble getting the computer to work properly? Yes ____ No _____

Did you have trouble getting the software to work properly? Yes ____ No _____

Did you have trouble understanding the assignment on the computer? Yes ____ No _____

Did you enjoy your work session today? Yes ____ No _____

Why or why not?

____

____

____

Did you try to get help? Yes ____ No _____

What kind of help did you try? On-Line ____ Teacher ____

Were you successful? Yes ____ No _____

Comments:

____

IESD TEACHER MONTHLY LOG

Student: ______________________________

Institution: ______________________________

Teacher: ______________________________

Group (circle one): Experimental Control

Directions: Use a copy of this log sheet once a month to note significant milestones in each student's academic development.

Mathematics

Describe the one or two most important changes this past month in this student's behavior that indicate significant growth in Mathematics.

Reading

Describe the one or two most important changes this past month in this student's behavior that indicate significant growth in Reading.

Writing

Describe the one or two most important changes this past month in this student's behavior that indicate significant growth in Writing.

Student Self-Assessment Form

Student's Name ______________________________

Institution ______________________________

Instructor ______________________________

Class ______________________________

Date ______________________________

Use this form to assess your improvement as a learner.

How have your reading skills improved since the beginning of the year? (Check on choice.)

_____ 1. Great Improvement
_____ 2. Some Improvement
_____ 3. Little Improvement

Please explain where you have improved and where you still have difficulty:

What are the most important causes for your improvement? (Check as many as you want.)

_____ Adult education classes
_____ Using the computer at home
_____ Help from a family member
_____ Help from a friend
_____ Other (Please explain):

How have your math skills improved since the beginning of the year?
(Check one choice.)

_____ 1. Great Improvement
_____ 2. Some Improvement
_____ 3. Little Improvement

Please explain where you have improved and where you still have difficulty:

What are the most important causes for your improvement? (Check as many as you want.)

_____ Adult education classes
_____ Using the computer at home
_____ Help from a family member
_____ Help from a friend
_____ Other (Please explain):

How have your writing skills improved since the beginning of the year? (Check one choice.)

_____ 1. Great Improvement

_____ 2. Some Improvement

_____ 3. Little Improvement

Please explain where you have improved and where you still have difficulty:

What are the most important causes for your improvement? (Check as many as you want.)

_____ Adult education classes

_____ Using the computer at home

_____ Help from a family member

_____ Help from a friend

_____ Other (Please explain):

What is your most important personal learning goal?

How have you improved in this since the beginning of the year?
(Check one choice.)

_____ 1. Great Improvement
_____ 2. Some Improvement
_____ 3. Little Improvement

Please explain where you have improved and where you still have difficulty:

What are the most important causes for your improvement? (Check as many as you want.)

_____ Adult education classes
_____ Using the computer at home
_____ Help from a family member
_____ Help from a friend
_____ Other (Please explain):

Student Reporting

Learners will be asked to keep a journal which would be provided to them. They would be asked to write an entry into the journal as often as they would like with a minimum of once per week (if they wanted to write after each on-line session, they would be able to).

The journal pages would contain the following areas for student reporting.

Date ____________

How long did you work on the computer? ________ hrs.

What did you work on? (check which one) On-line _____ Word Processing _____

Did you work alone on your work Yes ____ No ____

Did you work with someone else Yes ____ No ____

Did any family members work on the computer? Yes ____ No ____

Did you have trouble at all with your work? Yes ____ No ____

Did you have trouble getting the computer to work properly? Yes ____ No ____

Did you have trouble getting the software to work properly? Yes ____ No ____

Did you have trouble understanding the assignment on the computer? Yes ____ No ____

Did you enjoy your work session today? Yes ____ No ____

Why or why not?

____

____

____

Did you try to get help? Yes ____ No ____

What kind of help did you try? On-Line ____ Teacher ____

Were you successful? Yes ____ No ____

Comments:

____

Drexel University's Office of Computing Services
Power Learning Project

Learner's Report

Learners have been asked to keep a journal of their computer usage. This journal will record learner's feelings and experiences about using the computer and the CYBIS Integrated Learning System. This form will be completed anytime the learner experiences technical difficulties or has a rewarding experience they wish to share.

Learner's Name: ______________________________ **Today's Date:** ______________

How long did you work on the computer? **Hours** __________ **Minutes** __________

What did you work on? CYBIS ________ **Word Processing** ________ **Other** ________

Did you work alone or with someone? **Alone** ________ **With Someone** ________

If you worked with someone, who did you work with? **Tutor** ________

Friend ________ **Classmate** ________ **Family member** ________ **Other** ________

Did you have trouble getting the computer to work properly? If so, what happened?

____

____

____

Did you have trouble getting the software to work properly? If so, what happened?

____

____

____

Did you enjoy your session today? **Yes** ________ **No** ________

Why?____

____

____

Did you try to get help? **Yes** ________ **No** ________

What kind? Phone ________ **Pnote** ________ **Term-Talk** ________ **Term-Ask** ________

Term-Comment ________ **Other** ______________________

Were you successful? **Yes** ________ **No** ________

Why?____

____

____

Please Write Any Additional Comments On Reverse Side

Teacher Report

This report would be filled out by literacy teachers once per week minimum.

Date____________________________How long did you work with Imsatt project this week?________

Helping Students_______________hours Managing records_____________hours Reviewing and assigning lessons_______________hours

Did you have trouble at all with your work? yes________no________

Did you have trouble getting the hardware to work properly?
yes________no________

Did you have trouble getting the software to work properly?
yes_________no_________

What did you like about the software lessons you worked with today?

____

____

What did you dislike about the software lessons you worked with today?

____

____

Do the lessons enhance your students' experiences?
yes_________no______________

Why or why not?

____

____

Do your students use the computer more for on-line lessons? yes_______ or for off-line applications (word processing etc.) yes_________

Comments:

____

____

____

Power Learning Project
Phone Interview of Teachers and Administrators

Interviewee: ☐ **Date of Interview:** ☐

Have you encouraged your learners to keep a log? ○ Yes ○ No ○ N/A

Comment about learner logs?

Have you kept a log? ○ Yes ○ No ○ Sometimes

Comment about teacher logs:

Do your students feel the project is successful? ○ Yes ○ No ○ Sometimes

Why?

Do you feel the project is successful? ○ Yes ○ No ○ Sometimes

Why ? Teachers

Why? Administrators

How many of your students benefitted from the program? ☐

Power Learning Project
Phone Interview of Teachers and Administrators

In what ways did students benefit from the program?

In what ways did students not benefit from the program?

What presented difficulties for your learners?

☐ Hardware
☐ Phone Problems (static, call waiting, etc.)
☐ Telecommunications Software
☐ Educational Software
☐ Management System Problems
☐ Log-on Process
☐ Macintosh Interface
☐ IBM Interface
☐ Support from Teacher
☐ Support from MCOL
☐ Motivation
☐ Household Distractions
☐ Pre/Post Project Testing Procedures

Which was the worst?

○ Hardware
○ Phone Problems (static, call waiting, etc.)
○ Telecommunications Software
○ Educational Software
○ Management System Problems
○ Log-on Process
○ Macintosh Interface
○ IBM Interface
○ Support from Teacher
○ Support from MCOL
○ Motivation
○ Household Distractions
○ Pre/Post Project Testing Procedures

What presented difficulties for you?

☐ Hardware
☐ Phone Problems (static, call waiting, etc.)
☐ Telecommunications Software
☐ Ed. Software (technically, does it work?)
☐ Content of Software
☐ Management System Problems
☐ Pre/Post Project Testing Procedures
☐ Log-on Process
☐ Macintosh Interface
☐ IBM Interface
☐ Support from Organization
☐ Support from Drexel
☐ Support from MCOL
☐ Motivation
☐ Lack of Time/Money
☐ Lack of a computer at home

What presented the worst difficulty for you?

○ Hardware
○ Phone Problems (static, call waiting, etc.)
○ Telecommunications Software
○ Ed. Software (technically, does it work?)
○ Content of Software
○ Management System Problems
○ Pre/Post Project Testing Procedure
○ Log-on Process
○ Macintosh Interface
○ IBM Interface
○ Support from Organization
○ Support from Drexel
○ Support from MCOL
○ Motivation
○ Lack of Time/Money
○ Lack of a computer at home

How did you choose your participants?

☐ Years in the Program
☐ Personal Acquaintence
☐ Perceived Motivation
☐ Previous Computer Experience
☐ Random
☐ Eligible for DPA
☐ Grade level
☐ N/A

Would you do this project again? ○ Yes ○ No

If so, what would you do differently?

Were your expectations of the project met? ○ Yes ○ No

How many students did you start out with? ☐ How many students are now in the program? ☐

Why did some of your students drop?

Why did the other students finish the program?

Post-Power-Learning Project Teacher Interview

Interviewee ☐ **Date of Question:**

Have you encouraged your learners to keep a log? ○ Yes ○ No ○ N/A

Comment about learner logs (see next page):

Have you kept a log? ○ Yes ○ No ○ Sometimes

Comment about teacher logs (see next page)1:38:13 PM

How many students did you start out with?

How many students are now in the program?

How many students benefitted from the program?

What presented difficulties for your learners?

- ☐ Hardware
- ☐ Phone Problems (static, call waiting, etc.)
- ☐ Telecommunications Software
- ☐ Educational Software
- ☐ Management System Problems
- ☐ Log-on Process
- ☐ Macintosh Interface
- ☐ IBM Interface
- ☐ Support from Teacher
- ☐ Support from MCOL
- ☐ Motivation
- ☐ Household Distractions
- ☐ Pre/Post Project Testing Procedures

Which was the worst?

- ○ Hardware
- ○ Phone Problems (static, call waiting, etc.)
- ○ Telecommunications Software
- ○ Educational Software
- ○ Management System Problems
- ○ Log-on Process
- ○ Macintosh Interface
- ○ IBM Interface
- ○ Support from Teacher
- ○ Support from MCOL
- ○ Motivation
- ○ Household Distractions
- ○ Pre/Post Project Testing Procedures

What presented difficulties for you?

- ☐ Hardware
- ☐ Phone Problems (static, call waiting, etc.)
- ☐ Telecommunications Software
- ☐ Ed. Software (technically, does it work?)
- ☐ Content of Software
- ☐ Management System Problems
- ☐ Pre/Post Project Testing Procedures
- ☐ Log-on Process
- ☐ Macintosh Interface
- ☐ IBM Interface
- ☐ Support from Organization
- ☐ Support from Drexel
- ☐ Support from MCOL
- ☐ Motivation
- ☐ Lack of Time/Money
- ☐ Lack of a computer at home

What presented the worst difficulty for you?

- ○ Hardware
- ○ Phone Problems (static, call waiting, etc.)
- ○ Telecommunications Software
- ○ Ed. Software (technically, does it work?)
- ○ Content of Software
- ○ Management System Problems
- ○ Pre/Post Project Testing Procedure
- ○ Log-on Process
- ○ Macintosh Interface
- ○ IBM Interface
- ○ Support from Organization
- ○ Support from Drexel
- ○ Support from MCOL
- ○ Motivation
- ○ Lack of Time/Money
- ○ Lack of a computer at home

How did you choose your participants?

- ☐ Years in the Program
- ☐ Personal Acquaintence
- ☐ Perceived Motivation
- ☐ Previous Computer Experience
- ☐ Random
- ☐ Eligible for DPA
- ☐ Grade level
- ☐ N/A

Would you do this project again? ○ Yes ○ No

Were your expectations of the project met? ○ Yes ○ No

What would you do differently?

Post-Power-Learning Project Teacher Interview

Comment about learner logs:

Comment about teacher logs (see next page)1:38:13 PM

Why did your students drop?

Why did your other students stay in?

Post-Power-Learning Project Teacher Interview

In what ways did students benefit from the program?

In what ways did students not benefit from the program?

Do your students feel the project is successful? Why?

Do you feel the project is successful? Why

June 1, 1993

Dear CFL Learner:

Thank you for participating in the computer learning project. CFL hopes you find your experience with the Macintosh computer and the software meaningful and enjoyable. In order for the computers to be used at home, CFL needs to sign an agreement with you. The agreement makes certain that CFL and the learner understand the terms of the computer learning project.

The terms of the computer learning project are:

1. The Macintosh computer given to you on June 1, 1993, is the property of the Center for Literacy.
2. You are responsible for general care of the Macintosh computer at your home during the project.
3. The Macintosh computer is to be returned to the Center for Literacy at the end of the project.
4. The Center for Literacy is responsible for any costs related to the project. These costs include telephone charges to call for the software up to 45 hours per month.

* The Philadelphia County Assistance Office will help pay for part of the phone costs if you already receive assistance.

Please check here if you receive County assistance ____ .

5. Class attendance is necessary for the success of the project. If you cannot attend three weeks in a row, CFL will give your computer to another student.

Again, thank you for participating in the project and good luck.

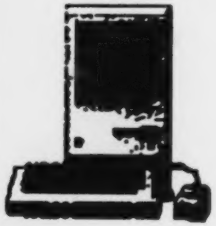
______________________ CFL

______________________ Learner

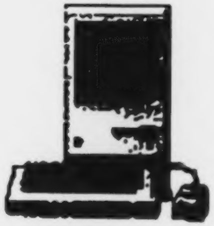
______________ Date

Instructor's On-Call Schedule (Group PHIADMIN)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Le Quyen 10:00-12 noon		Scot 7:00-9:00 PM	Fred 6:30-8:30 PM	Terry 6:00-8:30 PM	
Sam 10:30-12:30 PM	Theressa 8:00-10:00 PM	John 9:00-10:00 PM		Pedro 8:00-10:00 PM	



An Invitation to All Learners in the Power Learning Program



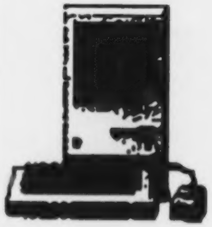
to attend a special orientation session where you can:

- learn about how the power learning can help you
- meet other adult learners
- share your ideas about home learning

The Mayor's Commission on Literacy will sponsor two orientation sessions in the Mayor's Reception Room
City Hall, Room 202

Saturday, November 14, 11:00 a.m.
Tuesday, November 17, 7:00 p.m.

Call the Mayor's Commission on Literacy, 875-6602, to let us know if you'll be there!



An Invitation to All Learners in the Power Learning Program

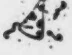
to attend a special orientation session where you can:

- learn about how the power learning can help you
- meet other adult learners
- share your ideas about home learning

The Mayor's Commission on Literacy will sponsor two orientation sessions in the Mayor's Reception Room
City Hall, Room 202

Saturday, November 14, 11:00 a.m.
Tuesday, November 17, 7:00 p.m.

Call the Mayor's Commission on Literacy, 875-6602, to let us know if you'll be there!

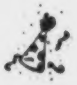


LONG DISTANCE LEARNING

THE POWER LEARNING PROJECT

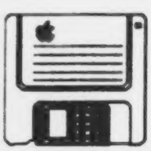
cordially invites you to its

MID-YEAR PROJECT PARTY

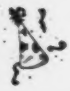


Thursday, April 29, 1993
Mayor's Reception Room
202 City Hall
6:00 p.m. - 7:30 p.m.
(entrance Northeast corner of City Hall)

Come and meet other learners
Ben Burenstein from Drexel University will give computer pointers
Make new P-Note Pals
Enjoy this Celebration of Learning
and much, much more...



Mayor's Commission on Literacy 875-6602

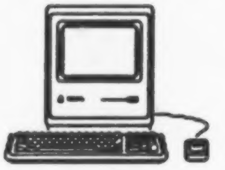


LONG DISTANCE LEARNING

THE POWER LEARNING PROJECT

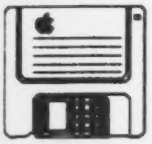
cordially invites you to its

MID-YEAR PROJECT PARTY



Thursday, April 29, 1993
Mayor's Reception Room
202 City Hall
6:00 p.m. - 7:30 p.m.
(entrance Northeast corner of City Hall)

Come and meet other learners
Ben Burenstein from Drexel University will give computer pointers
Make new P-Note Pals
Enjoy this Celebration of Learning
and much, much more...



Mayor's Commission on Literacy 875-6602

EALTH OF PENNSYLVANIA

DATE: March 11, 1993

SUBJECT: The Power Learning Project: Literacy for the Year 2000

TO: District Administrators

FROM: William E. Stroup
Deputy Executive Director

PURPOSE:

To announce an innovative demonstration project in adult education and instructions on the method of issuance of the special allowances for the project.

BACKGROUND:

The **Mayor's Commission on Literacy** with generous support from **Bell of Pennsylvania** has embarked on a promising new partnership aimed at building the literacy skills of welfare recipients, **The Power Learning Project: Literacy for the Year 2000.**

DISCUSSION:

The Power Learning Project will enable 100 learners to supplement their classroom instruction by accessing computer assisted instruction from their homes via a modern hook-up with main frame computer. This program integrates advance technology with classroom instruction so that the learners can spend more hours a week working toward their educational goals. Attached will you find a **Power Learning Program Goals and Objectives Factsheet** and a listing of **Participating Agencies in the Power Learning Program.**

Support from Philadelphia County Assistance Office is critical to the success of this program. Each month the learners will be charged **$20.00** for accessing the mainframe on which there are several hundred hours of educational programs. This charge will be authorized as a special allowance (equipment/supplies) for the first six months of this project. Districts will issue the entire six (6) months allowance as a One Time Issuance (O.T.I.). The method of issuance for the O.T.I. will be **Restricted Endorsement** and **Certified Mail** sending it directly to the participating agency from the attached list.

NEXT STEPS:

1. Share this memo with appropriate staff.
2. Contact **Barry Salandro**, Central Literacy Education Unit, **560-3417** with any questions or problems.

WES/kt

cc: Executive Staff
Central New Directions Supervisors
Mayor's Commission on Literacy

ATTACHMENT 3:
TEACHER TRAINING MATERIAL

TEACHER TRAINING MEETING #1
AGENDA

I. What is courseware?
II. What is telecommunications?
III. What is IMSATT?
IV. Potential advantages and drawbacks to an on-line educational system
V. The Basics of CYBIS
  A. Accessing the system: logging on
  B. Available courseware
    1. The content of CYBIS: Curriculum, course, module, lesson
    2. The structure of CYBIS: Assessment, Training, Post-assessment, Remediation or advancement
  C. Electronic mail and bulletin boards
VI. HyperCard Presentation on Using CYBIS
VII. Set up rotation to make sure their is one teacher on each night learners might log on
VIII. Set up appointments for individual trainings

TEACHER TRAINING MEETING #2 (INDIVIDUAL TRAINING)
AGENDA

I. Review Previous Training
II. Give out teacher logons
III. Log on and explore teacher menus
  A. How to access the courseware catalog
  B. Electronic mail
  C. Viewing learner records
IV. Log on and explore learner menus
  A. Courseware
    1. Integrated Learning System sequenced courseware
    2. Additional courseware: Games and unsequenced educational software
  B. Learner Email
V. Take an assessment and explore a lesson
VI. Give out suggested teacher and learner logs
VII. Explain support system.

VIII. QUESTIONS AND ANSWERS.

TEACHER TRAINING MEETING #3
AGENDA

I. Introductions and overall comments on how the project is going
  A. How are the machines working?
  B. How is the courseware working for your group?
II. Logon problems
  A. Adjusting the logon for teachers who have call waiting.
  B. Teacher questions and comments on the logon proccess
III. Viewing learners' results:
  A. Viewing data from the entire group
  B. Viewing data from individuals
  C. Viewing the work of learners currently on-line.
IV. Communications using the bulletin board

    - A. Notes to and with learners
    - B. Teacher notes
- V. Questions and Answers

TEACHER TRAINING MEETING #4

AGENDA

- I. Review and discuss positive and negative experiences
- II. Review and discuss any alterations in the logon, system, or record-keeping which have occurred since the inception of the project, including implementation of additional courseware.
- III. Review examining learner results
- IV. On-Line Communication
    - A. Term-Talk
    - B. Term-Ask
    - C. Term-Comment
    - D. Bulletin Board
    - E. Student Monitoring
- IV. Review of logs and record-keeping
- V. Questions and Answers

TEACHER TRAINING MEETING #5

AGENDA

- I. Review and discuss positive and negative experiences
- II. Review and discuss any alterations in the logon, system, or record-keeping which have occurred since the inception of the project, including implementation of additional courseware.
- III. Review examining learner results
- IV. On-Line Communication
    - A. Term-Talk
    - B. Term-Ask
    - C. Term-Comment
    - D. Bulletin Board
    - E. Student Monitoring
- IV. Review of logs and record-keeping
- V. Questions and Answers

FOR TEACHERS AND INSTRUCTORS

HOOKING UP YOUR MODEM

1. Run a phone cord from your wall jack to the modem.

2. Run a phone cord from your modem to your phone.

3. Run the appropriate connection from the modem to the jack on the back of the computer with a little telephone icon.

4. If modem has an external power cord, connect it. If not, don't worry.

SIGN-ON PROCEDURE

1. Put in your Cybis and System disk, metal side forward, title up.

2. Double click on the icon which says MacPAD. You will get a blank screen.

3. Type **atdt 1-800-252-0778,** then **Return** (no need for dashes). **If you are calling from a type of line where you need to type 9 first to get out, type atdt 9-1-800-252-0778.**

4. The phone will be dialed. You may see text which says "Dialing" and "Ringing,", you may hear the phone dial and ring, or neither may happen. **If nothing happens, wait a minute or two , disconnect, and try again.** Try several variations. Be creative. If you are stuck here, call Ben (895-1282 work, 844-7085 home) or Terry (895-6753). (You may need to disconnect and reconnect your modem to free up the line. You will be able to tell if you hear a hissing or squealing over your regular phone line. **BUT IT WILL PROBABLY WORK!!**

5. When it says "Connect," press **<Return>** twice. You will see the Cybis screens.

6Type in your username: (not case sensitive)

7. Type in your groupname.You have 2 groups:

    1) phiadmin.
    2) phi00009

phiadmin is where you control the system, can look around, and are an instructor.

phi00009 is where you are routed into the learner's system, see what they see, and take courses which they experience.

8. Go up into the **Keys** menu and choose "Key buttons." Press the Shift-stop compination

9. Make up a password which is unique to you and other people would not easily guess.

10. Explore

SAMPLE OF EARLY HANDOUT TO LOG ON FROM DOS

Sign-on Procedure for IMSATT

1. Switch to drive A
2. Type **access <R>**
3. If necessary set configuration to 2400 or whatever speed the modem is.
4. Type **atdt 1-800-252-0778,** then **Return** twice (no need for dashes)
5. Settings will be 7-e-half
6. Username: jennyfer
7. Grpname:
    1) phiadmin (for administrative purposes)
    2) phi00009 (for exploring the student sign-on)
8. Function Keys:
    F7 is LAB (label?)
    F9 is DATA
    Next is enter or return
    F8 is BACK (and quit, at the end)
    F10 is Stop
    Shift-F10 seems to be quit.

Power Learning Project
MacPad/Modem Log-On Directions

Step-One

- Make sure your phone is connected to the modem.
- Turn on modem.
- Turn on computer.

Step-Two

- Place System/MacPad diskette into drive.
- Double-click on disk icon to open window.
- Double-click on MacPad icon to open program.

Step-Three

- Type the following if you **DO NOT HAVE CALL WAITING**:
  atdt18002520778 (This is only a temporary number!)

- Type the following if you **DO HAVE CALL WAITING**:
  atdt*70,18002520778 (This is only a temporary number!)

Step-Four

Press the Return Key 2 times.

Wait for the following to appear:

SEE NEXT PAGE

C. To Set Up Your Modem

1. You have three cables and the modem.

   One cable is for connecting the modem to the computer - we will call it the computer cable.

   Another cable is for connecting the modem to the phone jack - we will call this one the phone cable.

   The third cable is for connecting the modem to the electrical socket or your surge protector - we will call it the power cable.

2. Take the computer cable and connect it to the computer and the modem. It works just like the other computer cables we use. The large end connects to the modem, the small end to the computer in the hole under the picture of the phone.

3. Take the phone cable and place one end in the back of the modem in the phone jack on the right. Place the other end of the phone cable in your wall phone jack.

4. Take the power cable and place the small end in the hole on the left side of the back of the modem. Place the normal end into the electrical socket or your surge protector.

D. To Use Your Modem

1. Turn on your modem
2. Turn on your computer
3. Place your start-up disk in the computer
4. Double click on the picture of the "Start-Up" disk
5. Double click on the picture of the "CYBIS" folder
6. Double click on the picture of the "Power Learning" document or page
7. The communications program is now starting and you will see a box reading, "Dialing Power Learning"

   Sit back and wait. You will hear the phone dial and then hear two high sounds and a screeching sound

   Sit back and wait. You will see the word "Connect" on your screen and all sorts of words, letters and numbers
8. The screen will keep moving and then stop when it reads, "[24;1H_"
9. The "_" is a cursor and is blinking. Type "1" and press "Return" twice. The screen will start moving

   If the screen stops and reads,
   "24;1H24;1HInvalid choice; please try again 24;1H"
   Type "1" and press "Return" twice

E. To Use "CYBIS"

1. When the screen reads,
   "Enter your user group, and then press NEXT,"

   Type the name, "smithm" and press "return"

2. When the screen reads,
   "Enter your user group, and then press Shift-Stop,"

   Type, "phi00004" and press shift and the "stop" command

3. When the screen reads,
   "Enter your password, then press NEXT,"

   Type your password and press "return"

4. You are now at the "Main Menu"

   With the mouse or small hand on the screen, click the subject you want to do

5. You are now at the subject "Menu"

   Follow the directions

```
        Change options that gail can use.
        These options will hold true at all times.

   Primary Instructor Options:

     yes   a   choose a lesson from an instr. file CATALOG

     yes   b   choose ANY lesson (by lesson name)

     yes   c   see who is running at the SITE

     yes   d   see system-wide list of USERS

     yes   e   access PUBLIC notes and system announcements

     yes   f   Receive TERM-ask requests




                  Press HELP for information.
        Change options that gail can use.
        These options will hold true at all times.

    File Editing and Printing Options:

       no  a  EDIT accounts (with appropriate codewords)

       no  b  EDIT datafiles (with appropriate codewords)

       no  c  request PRINTS of files

       no  d  EDIT group "phiadmin" (with specified options)
             (instructor need not have group "change" code)
       no  e  edit OTHER groups (with specified options)
             (instructor must also have group "change" code)
       no  f  change group DESCRIPTION

       no  g  change group CODEWORDS or FILES (router etc.)




                  Press HELP for information.
```

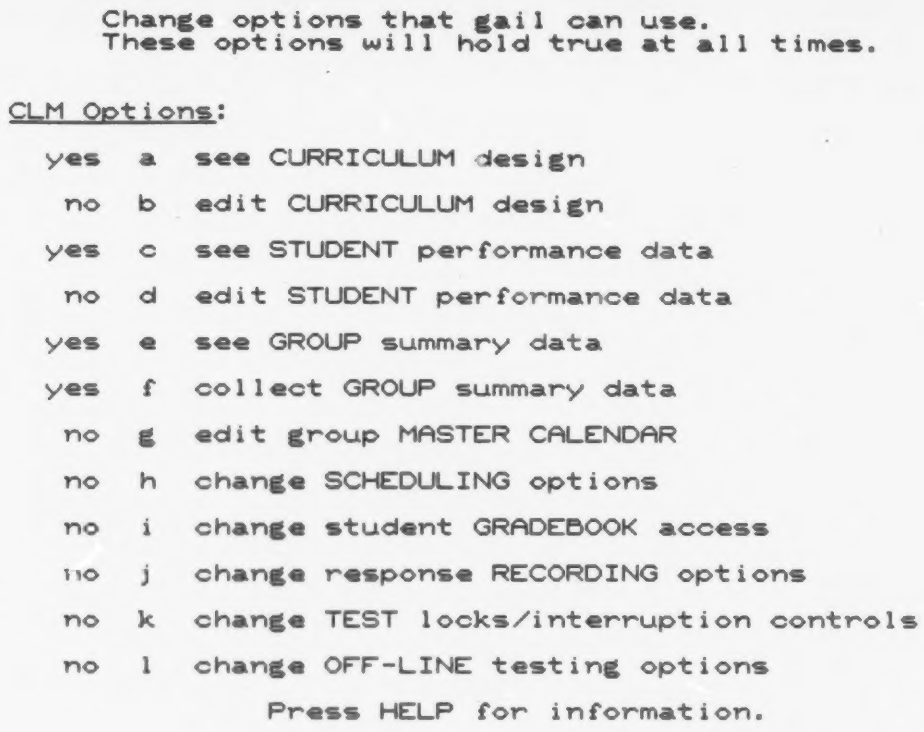
```
     Change options that gail can use.
     These options will hold true at all times.

Roster Options:

  yes  a  see the ROSTER of people

   no  b  create STUDENT record

   no  c  create MULTIPLE record

   no  d  create AUTHOR record

   no  e  create INSTRUCTOR record

   no  f  set up a TEMPLATE record

   no  g  COPY a record from another group

   no  h  DELETE someone from the roster

   no  i  DELETE ALL records

  yes  j  STATISTICS on records



              Press HELP for information.
     Change options that gail can use.
     These options will hold true at all times.

General Record Editing Options:

  yes  a  SEE someone's record

   no  b  EDIT student or multiple records

   no  c  EDIT author or instructor records

   no  d  TURN OFF someone's record

   no  e  change spelling of student's NAME

   no  f  change signon PASSWORD

   no  g  set author/instructor OPTIONS

   no  h  change application lesson

   no  i  change student router

   no  j  change student curriculum/instructor file

   no  k  change EXPIRATION DATE


             Press HELP for information.
     Change options that gail can use.
     These options will hold true at all times.

Student Record Editing Options:

   no   a  change current lesson

   no   b  change current unit

  yes   c  see student variables

   no   d  change student variables

  yes   e  see router variables

   no   f  change router variables




              Press HELP for information.
```

```
        Change options that gail can use.
        These options will hold true at all times.

    Student Record Editing Options:

       no   a   change current lesson

       no   b   change current unit

      yes   c   see student variables

       no   d   change student variables

      yes   e   see router variables

       no   f   change router variables




                Press HELP for information.
        Change options that gail can use.
        These options will hold true at all times.

    Active User Options:

      yes   a   see who is RUNNING

      yes   b   MONITOR a running student

      yes   c   SIGN-OUT a running student

      yes   d   send MESSAGE to a running student









               Press HELP for information.
```

```
     Change options that gail can use.
     These options will hold true at all times.

Messages and Notes:

  yes   a   leave a MESSAGE for someone

  yes   b   manage personal NOTES activity




               Press HELP for information.
```

```
          Change options that gail can use.
          These options will hold true at all times.

     Data Collection Options:

       yes  a  see individual DATA collection options

        no  b  change individual DATA collection options

        no  c  change group-wide DATA COLLECTION options




                    Press HELP for information.
          Change options that gail can use.
          These options will hold true at all times.

    "mrouter" Options:

      yes  a   see CURRICULUM design

      yes  b   see individual curriculum STATUS

       no  c   change curriculum MODULES

       no  d   change module completion CRITERIA

       no  e   change module PROGRESSION order

       no  f   change curriculum SEQUENCES

       no  g   change lesson CATALOG

       no  h   change individual curriculum MODULE setting

       no  i   create individual curriculum SEQUENCE

       no  j   change individual SCORE or lesson COMPLETION

               Press NEXT for more "mrouter" options

                  Press HELP for information.
```

```
        Change options that gail can use.
        These options will hold true at all times.

    "mrouter" Options (continued):

      no  a  change instructor file information

      no  b  COPY from another mrouter CATALOG

      no  c  COPY another INSTRUCTOR file

      no  d  extend curriculum SPACE (no. of modules, etc.)

      no  e  DESTROY all MODULES

      no  f  DESTROY all SEQUENCES

      no  g  DESTROY the CATALOG




                 Press HELP for information.
```



```
         Change options that gail can use.
         These options will hold true at all times.

CLM Options:

    yes  a  see CURRICULUM design

     no  b  edit CURRICULUM design

    yes  c  see STUDENT performance data

     no  d  edit STUDENT performance data

    yes  e  see GROUP summary data

    yes  f  collect GROUP summary data

     no  g  edit group MASTER CALENDAR

     no  h  change SCHEDULING options

     no  i  change student GRADEBOOK access

     no  j  change response RECORDING options

     no  k  change TEST locks/interruption controls

     no  l  change OFF-LINE testing options

                Press HELP for information.
```

Making New Words 2

Before proceeding with this course, there are a few things you should understand fully:

- This course is divided into 14 modules.
- Each module is given a single letter name for easy reference.
- Each module contains:

--one or more objectives (objectives describe what you will be able to do when you have finished this course)

--some test questions to see how well

--a list of study materials which will help you learn to master each objectiveMaking

You can look at the description of any listed module and see its objectives at any time.

You can test on any module listed under:

"MODULES YOU CAN WORK ON NOW"

Following each test, the system will select study materials best suited to your needs.

The recommended procedure is as follows:

1) Study the module list.

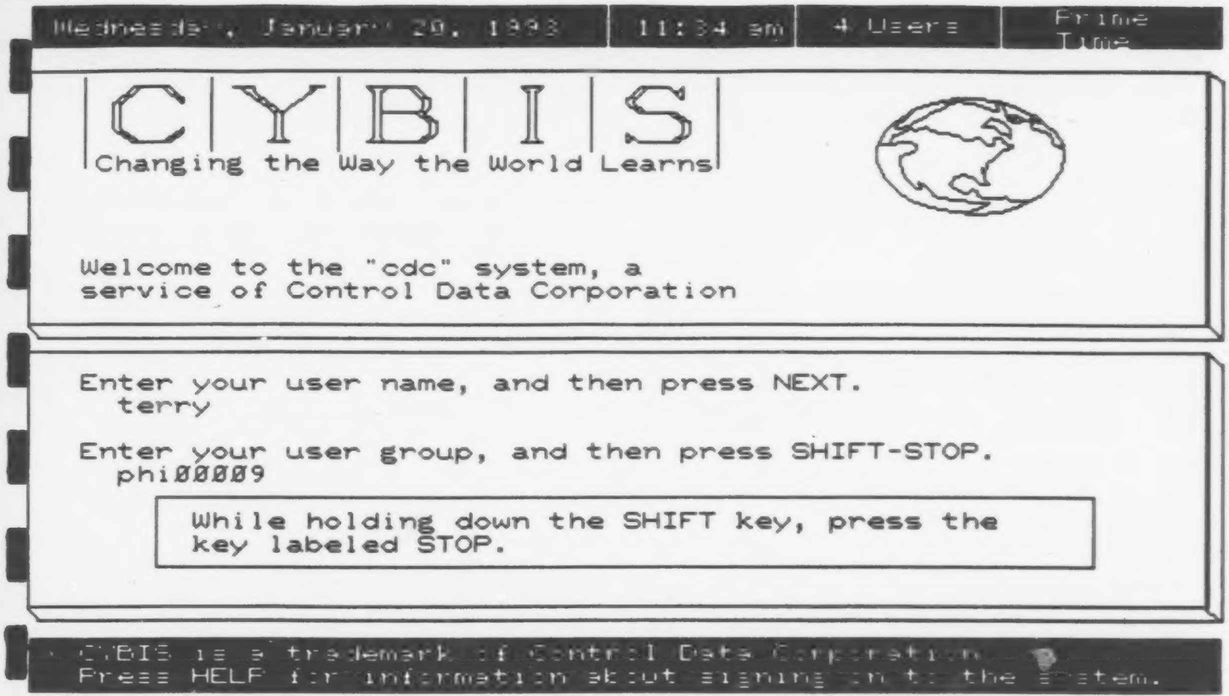
2) Read the description and objectives in the module(s) of interest.

3) Select a module and try taking the test for it -- or skip the test and ask for a study assignment.

4) If you take the test and master it, select another module. If you do not, you should study the assigned materials for the module and then try the test.

4. There are 9 "Courses" in reading. Course 1 , "Making New Words 1," has 15 modules. 2, Making New Words 2, Has 14 modules. 3, Understanding New Words 1, has 17 modules. 4, Understanding New Words 2, has 13 modules. 5, Understanding What you Read 1, has 21. 6, Understanding What You Read 2, has 12. 7, thinking about what you read 1, has 16. 8, thinking about what you read 2, has 11.9, Judging what you read, has 20. 139 modules

#10



Wednesday, January 20, 1993 | 11:34 am | 4 Users | Prime Time

Welcome to the "cdc" system, a
service of Control Data Corporation

Enter your user name, and then press NEXT.
terry

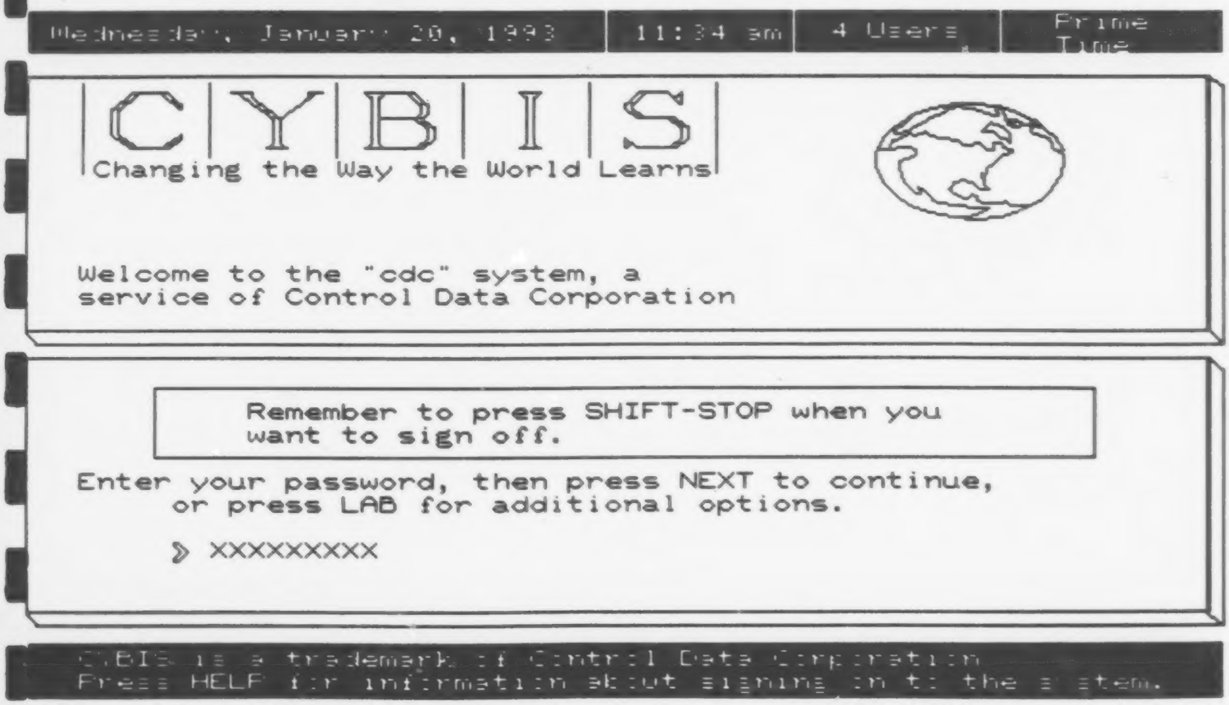
Enter your user group, and then press SHIFT-STOP.
phi00009

While holding down the SHIFT key, press the
key labeled STOP.

CYBIS is a trademark of Control Data Corporation.
Press HELP for information about signing on to the system.

Shift - ⌘ Command - S = Shift-Stop
Left Hand Right Hand

#11



Wednesday, January 20, 1993 | 11:34 am | 4 Users | Prime Time

Welcome to the "cdc" system, a
service of Control Data Corporation

Remember to press SHIFT-STOP when you
want to sign off.

Enter your password, then press NEXT to continue,
or press LAB for additional options.

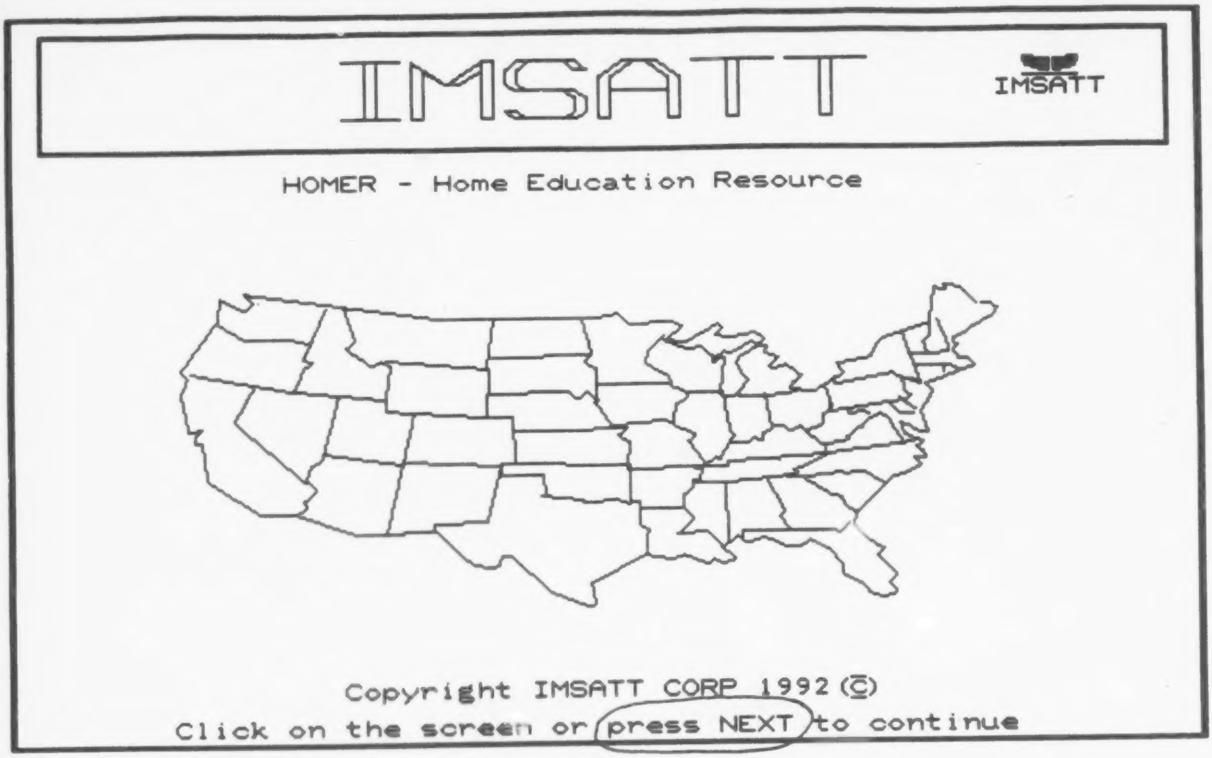
» XXXXXXXXX

CYBIS is a trademark of Control Data Corporation
Press HELP for information about signing on to the system.

Next = Return

BEST COPY AVAILABLE

#5



IMSATT

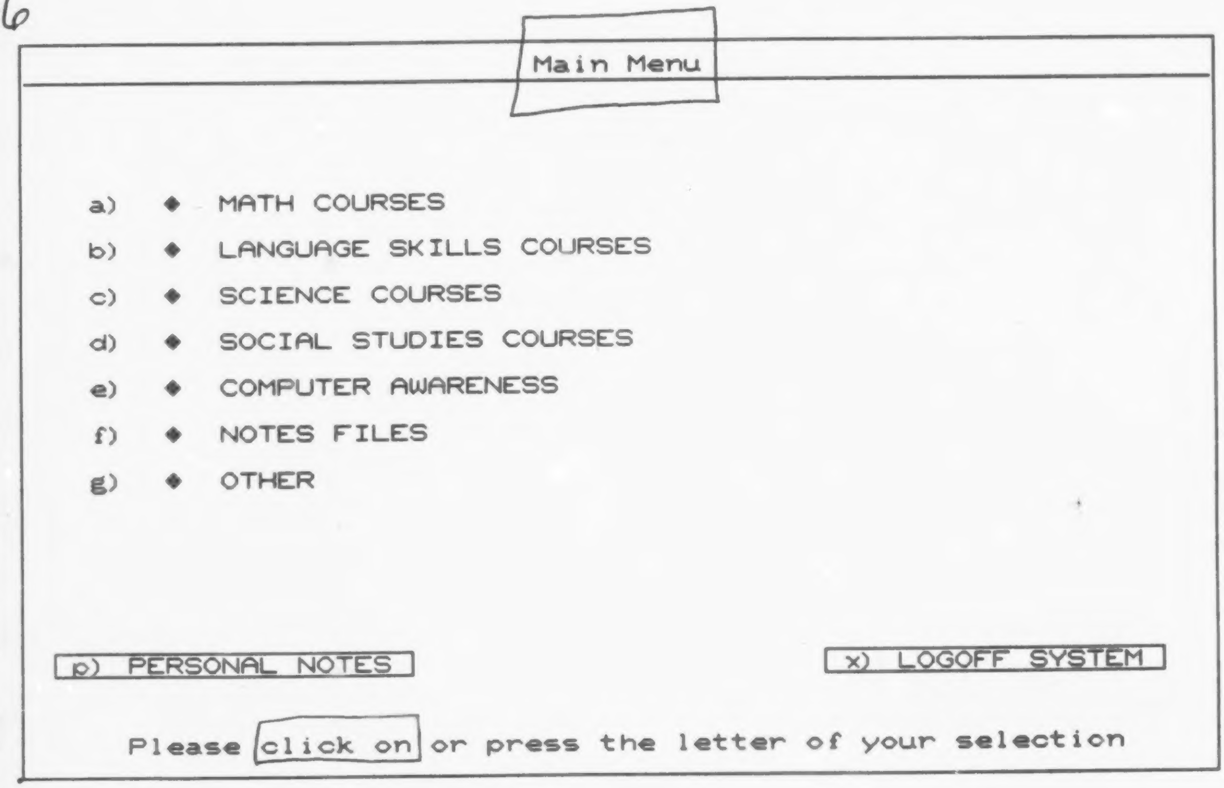
IMSATT

HOMER - Home Education Resource

Copyright IMSATT CORP 1992 ©

Click on the screen or press NEXT to continue

#6



Main Menu

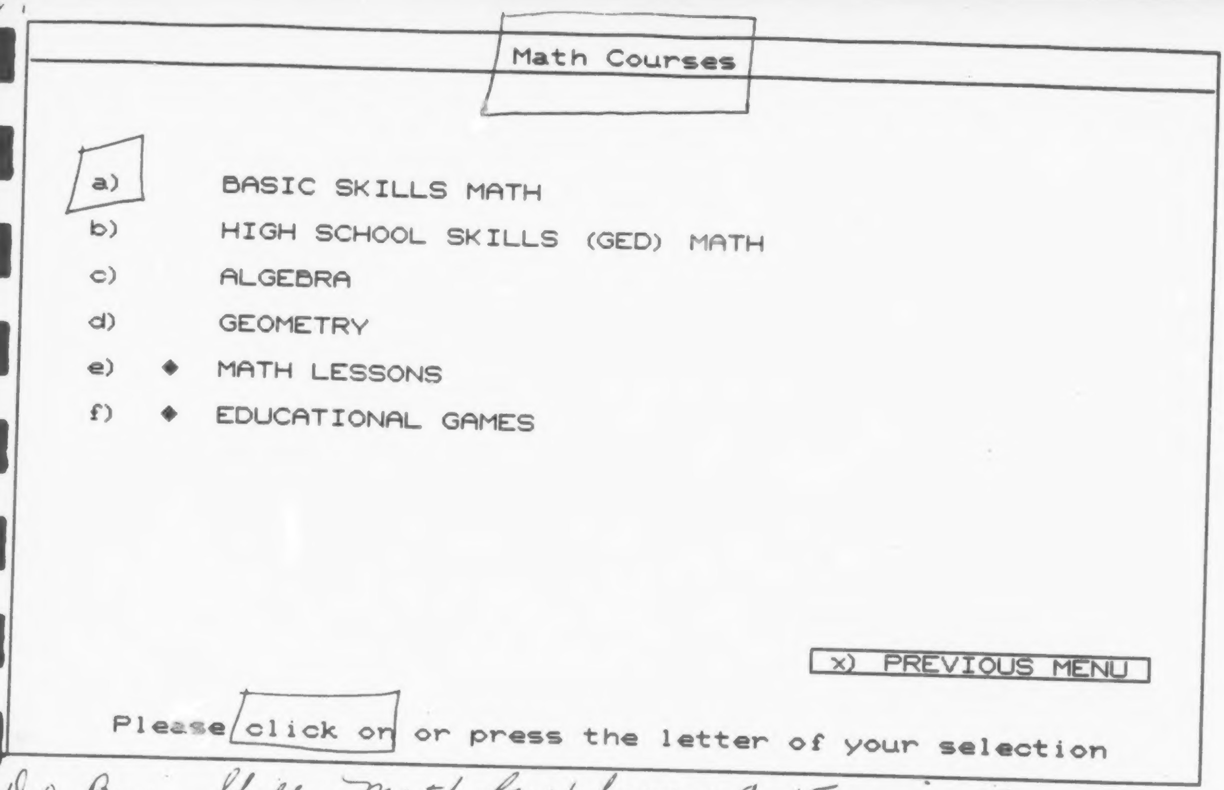
a) ◆ MATH COURSES
b) ◆ LANGUAGE SKILLS COURSES
c) ◆ SCIENCE COURSES
d) ◆ SOCIAL STUDIES COURSES
e) ◆ COMPUTER AWARENESS
f) ◆ NOTES FILES
g) ◆ OTHER

p) PERSONAL NOTES

x) LOGOFF SYSTEM

Please click on or press the letter of your selection

#



Math Courses

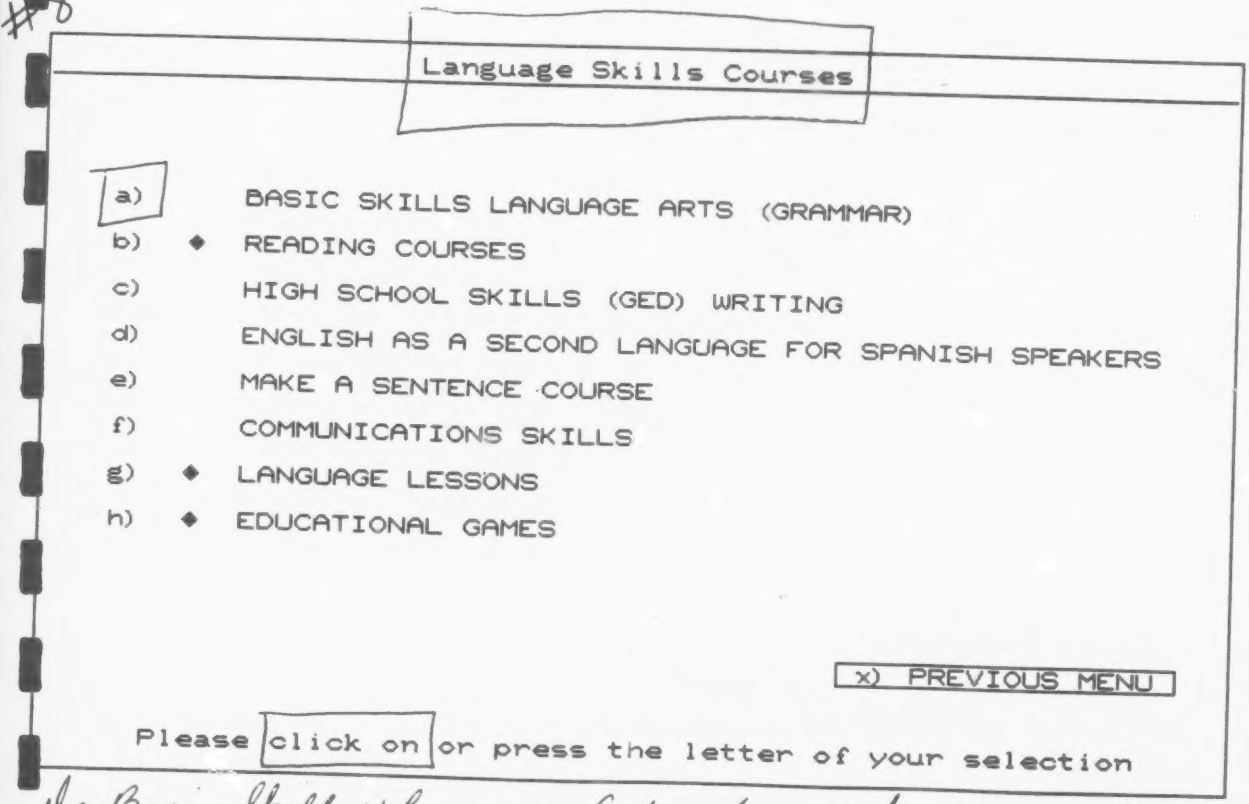
a) BASIC SKILLS MATH
b) HIGH SCHOOL SKILLS (GED) MATH
c) ALGEBRA
d) GEOMETRY
e) ◆ MATH LESSONS
f) ◆ EDUCATIONAL GAMES

x) PREVIOUS MENU

Please click on or press the letter of your selection

Do Basic Skills Math for 1 hour & 15 minutes.

#8



Language Skills Courses

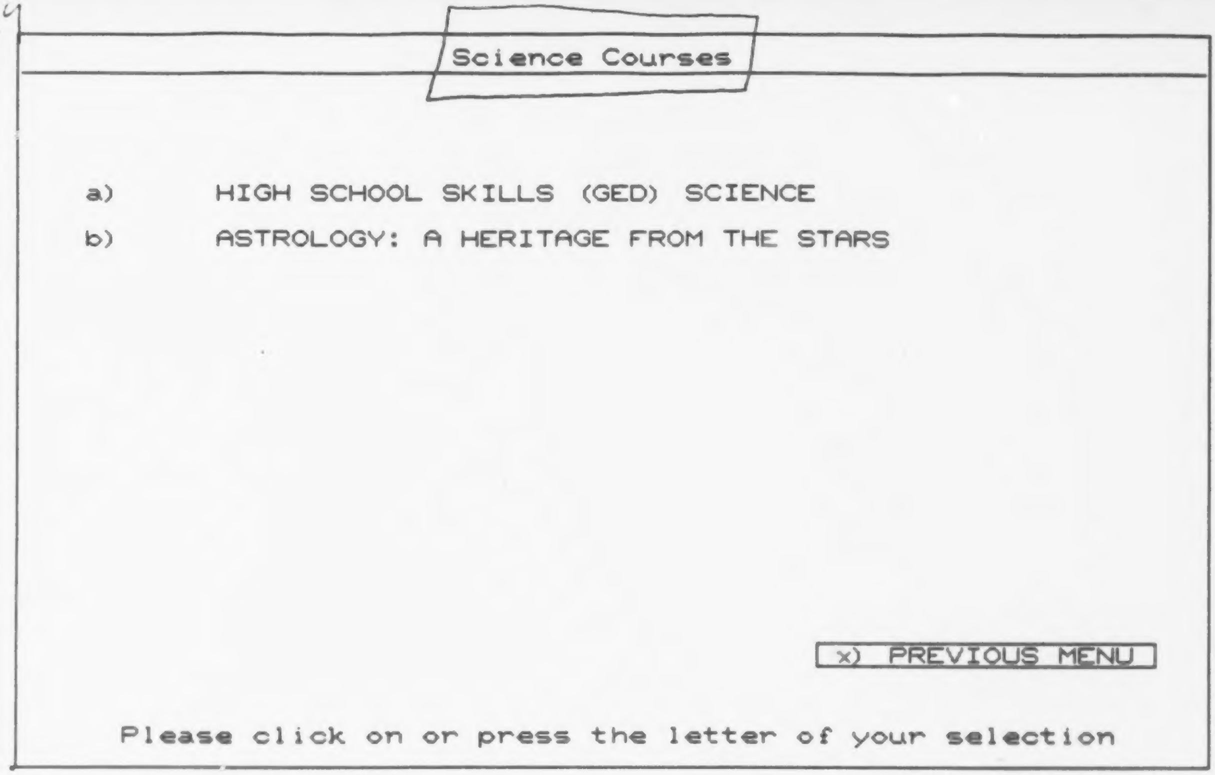
a) BASIC SKILLS LANGUAGE ARTS (GRAMMAR)
b) ◆ READING COURSES
c) HIGH SCHOOL SKILLS (GED) WRITING
d) ENGLISH AS A SECOND LANGUAGE FOR SPANISH SPEAKERS
e) MAKE A SENTENCE COURSE
f) COMMUNICATIONS SKILLS
g) ◆ LANGUAGE LESSONS
h) ◆ EDUCATIONAL GAMES

x) PREVIOUS MENU

Please click on or press the letter of your selection

Do Basic Skills Language Arts for 1 hour and 15 minutes.

#4



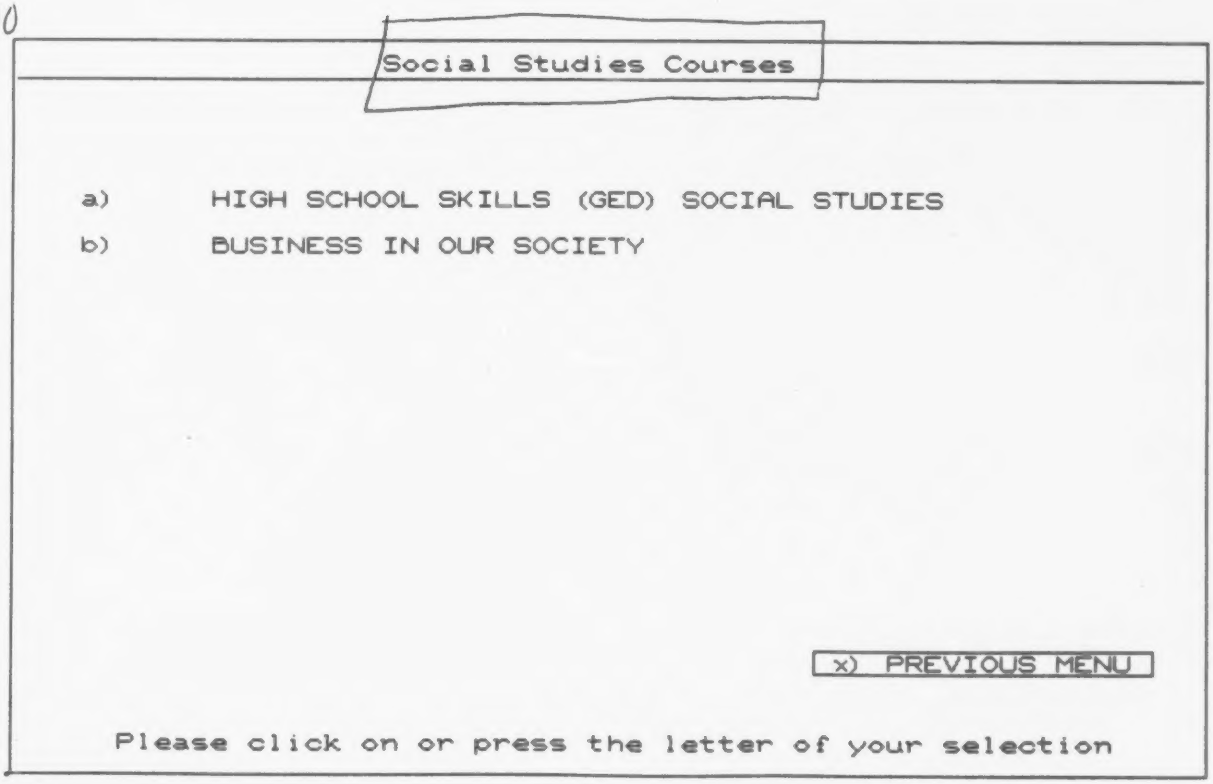
Science Courses

a) HIGH SCHOOL SKILLS (GED) SCIENCE

b) ASTROLOGY: A HERITAGE FROM THE STARS

Please click on or press the letter of your selection

#10



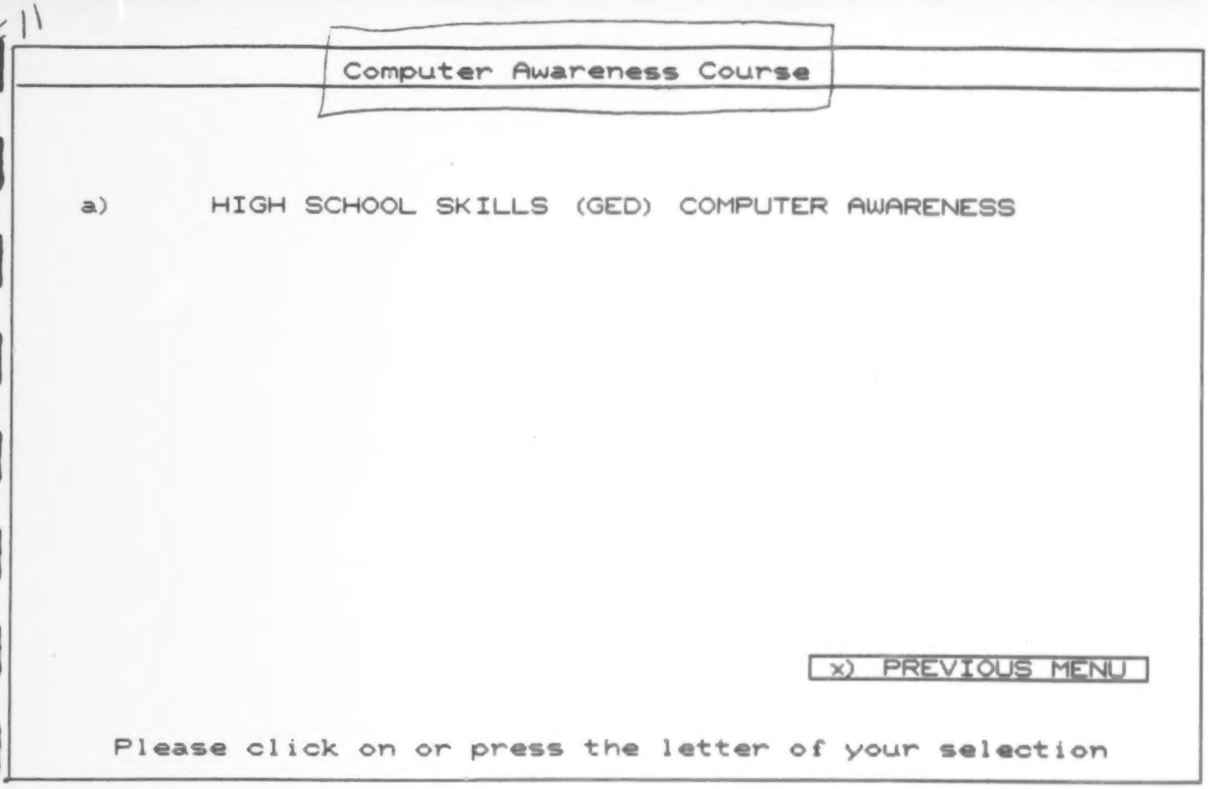
Social Studies Courses

a) HIGH SCHOOL SKILLS (GED) SOCIAL STUDIES

b) BUSINESS IN OUR SOCIETY

Please click on or press the letter of your selection

#11



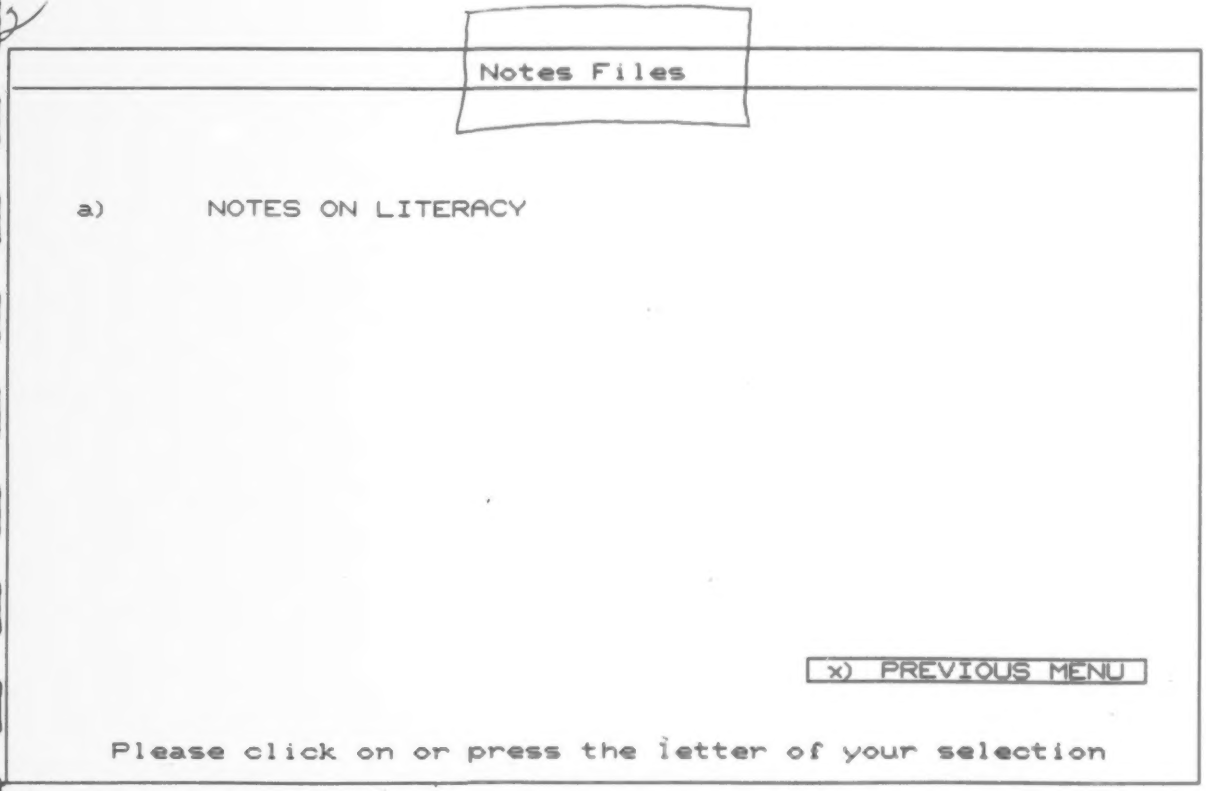
Computer Awareness Course

a) HIGH SCHOOL SKILLS (GED) COMPUTER AWARENESS

x) PREVIOUS MENU

Please click on or press the letter of your selection

#12



Notes Files

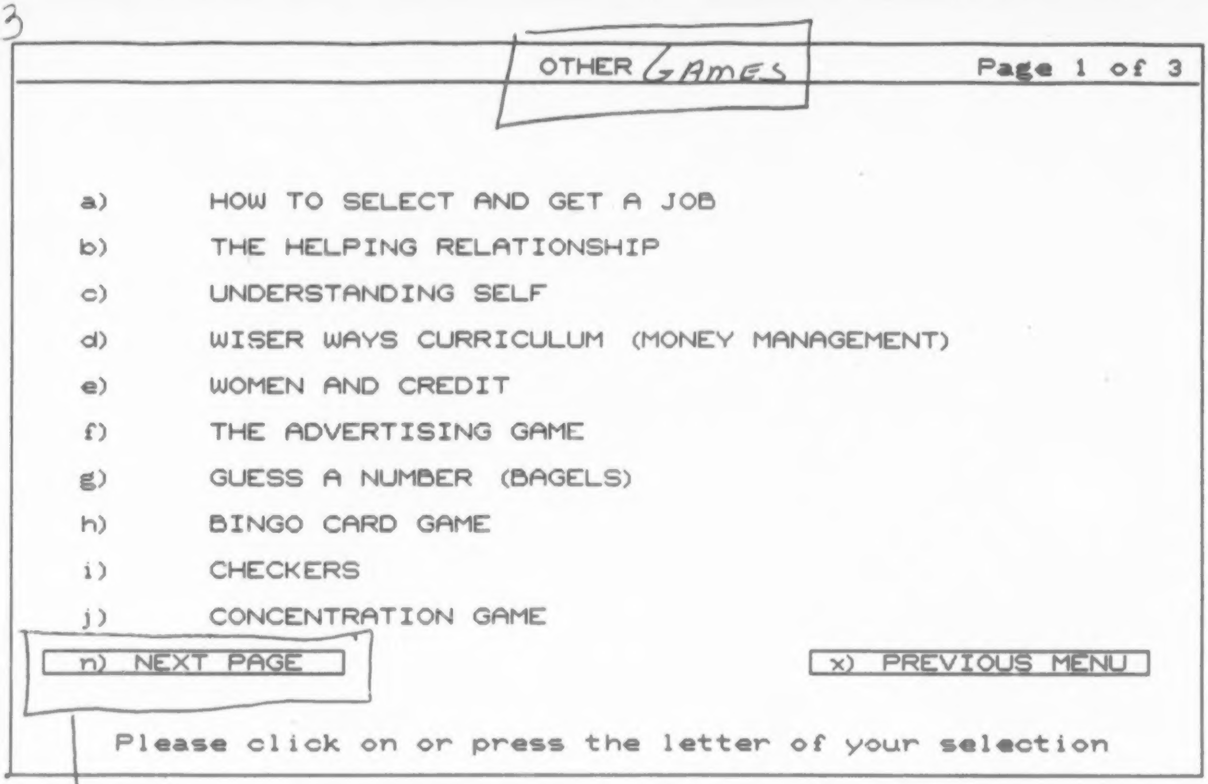
a) NOTES ON LITERACY

x) PREVIOUS MENU

Please click on or press the letter of your selection

Read Notes Files to update on current news about Power Learning Project.

#13



OTHER Games

Page 1 of 3

a) HOW TO SELECT AND GET A JOB

b) THE HELPING RELATIONSHIP

c) UNDERSTANDING SELF

d) WISER WAYS CURRICULUM (MONEY MANAGEMENT)

e) WOMEN AND CREDIT

f) THE ADVERTISING GAME

g) GUESS A NUMBER (BAGELS)

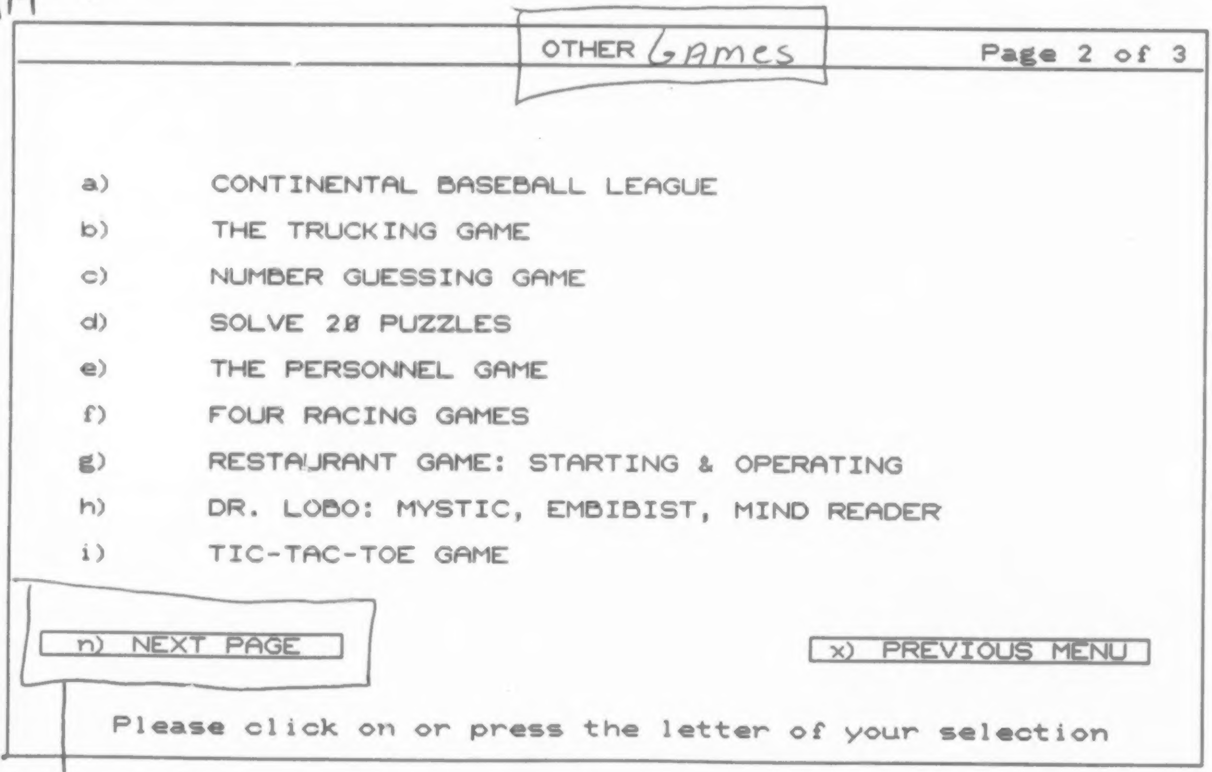
h) BINGO CARD GAME

i) CHECKERS

j) CONCENTRATION GAME

Please click on or press the letter of your selection

#14



OTHER Games

Page 2 of 3

a) CONTINENTAL BASEBALL LEAGUE

b) THE TRUCKING GAME

c) NUMBER GUESSING GAME

d) SOLVE 20 PUZZLES

e) THE PERSONNEL GAME

f) FOUR RACING GAMES

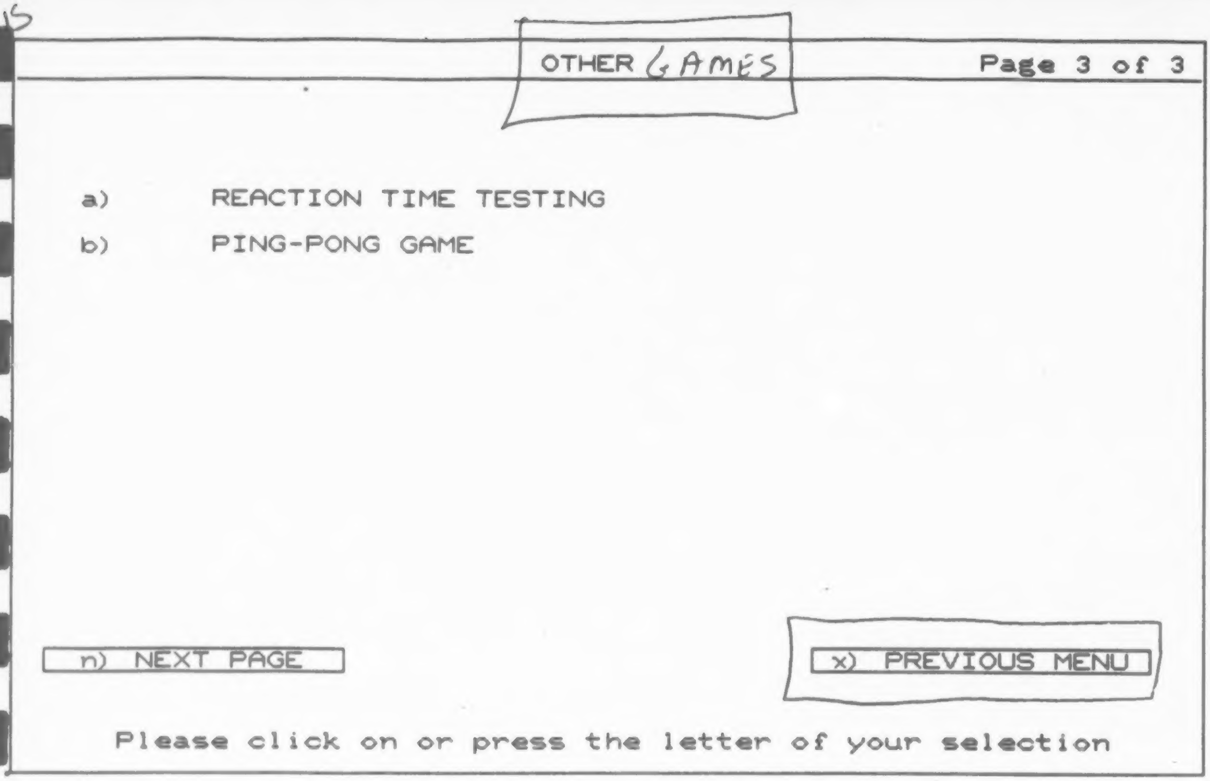
g) RESTAURANT GAME: STARTING & OPERATING

h) DR. LOBO: MYSTIC, EMBIBIST, MIND READER

i) TIC-TAC-TOE GAME

Please click on or press the letter of your selection

#15



OTHER GAMES

Page 3 of 3

a) REACTION TIME TESTING

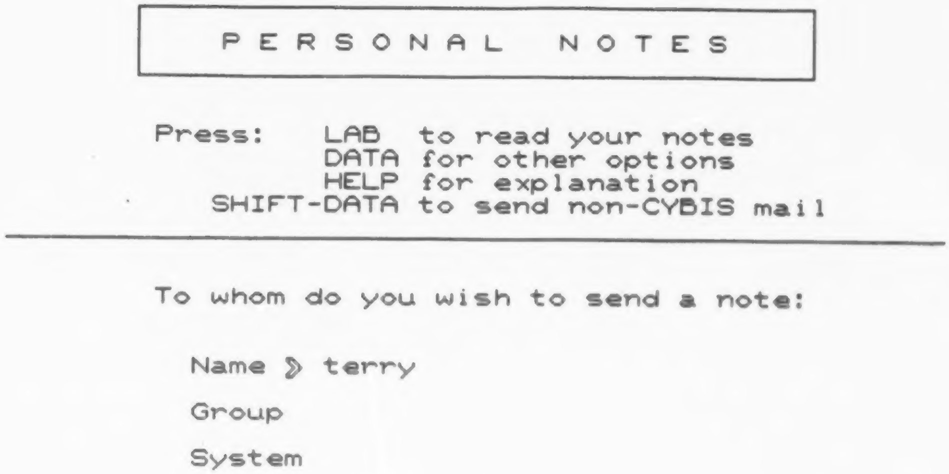
b) PING-PONG GAME

n) NEXT PAGE

x) PREVIOUS MENU

Please click on or press the letter of your selection

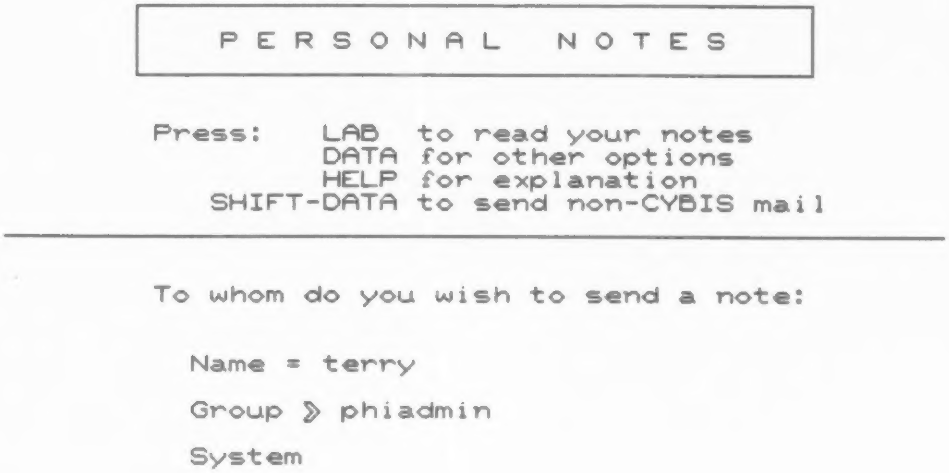
#16



```
              P E R S O N A L   N O T E S

           Press:     LAB   to read your notes
                      DATA  for other options
                      HELP  for explanation
                 SHIFT-DATA to send non-CYBIS mail

           To whom do you wish to send a note:

             Name ≫ terry

             Group

             System
```

TYPE NAME of Person you wish to send mail to and then Press Return.

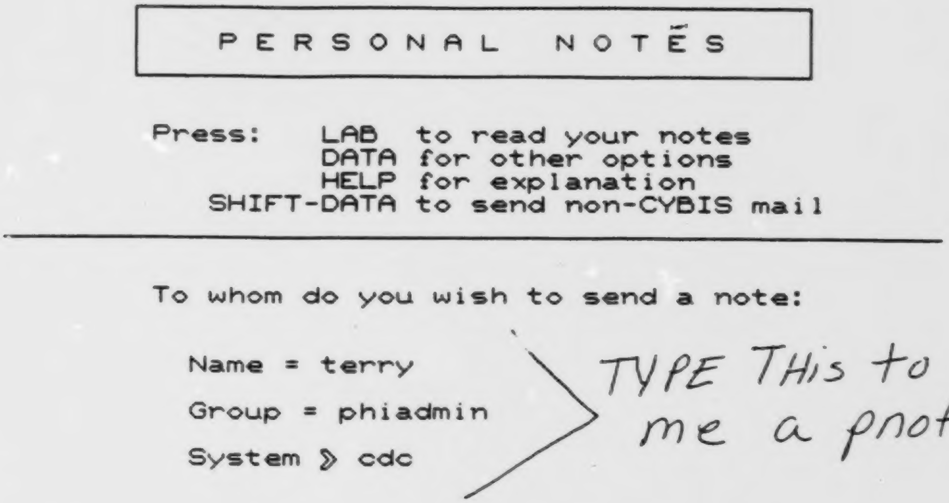
#17



```
              P E R S O N A L   N O T E S

           Press:     LAB   to read your notes
                      DATA  for other options
                      HELP  for explanation
                 SHIFT-DATA to send non-CYBIS mail

           To whom do you wish to send a note:

             Name = terry

             Group ≫ phiadmin

             System
```

Type the group name of the person you are sending mail to and then press return.

#18

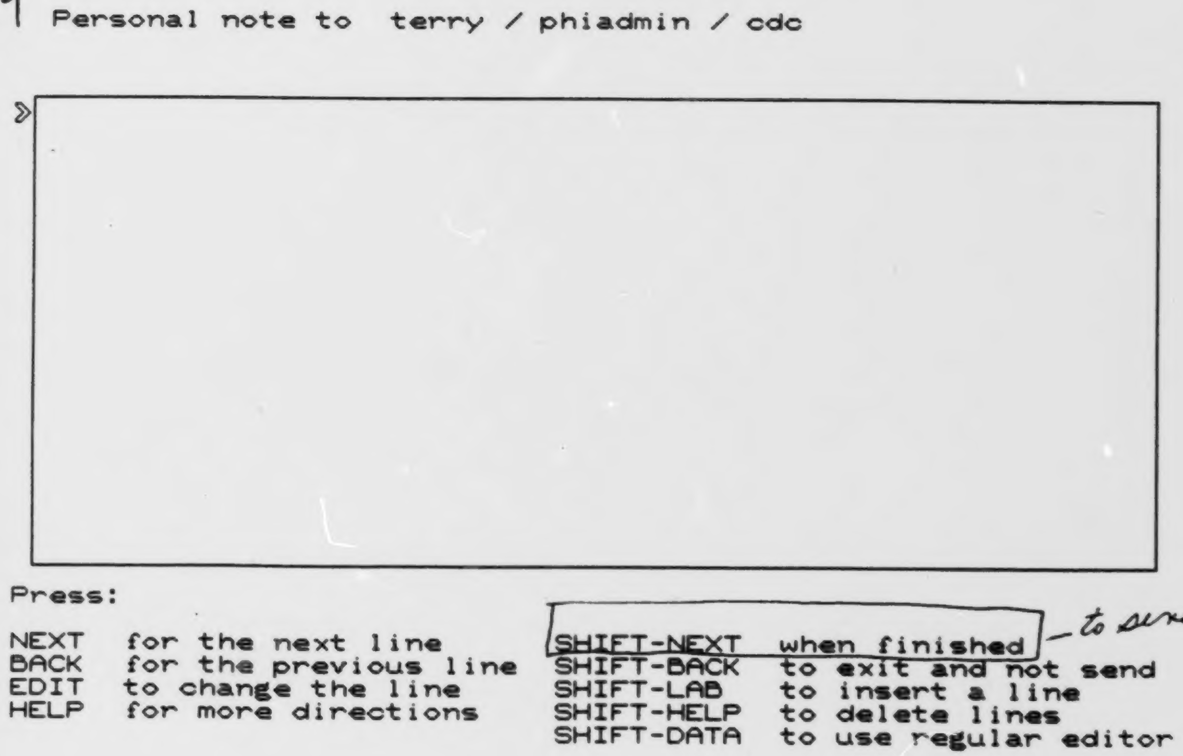


```
                    PERSONAL NOTES

          Press:    LAB   to read your notes
                    DATA  for other options
                    HELP  for explanation
               SHIFT-DATA to send non-CYBIS mail
   ____________________________________________________

          To whom do you wish to send a note:

             Name = terry

             Group = phiadmin

             System » cdc
```

TYPE THis to senD me a pnote!

Type the system name (see above) and press Return.

#19



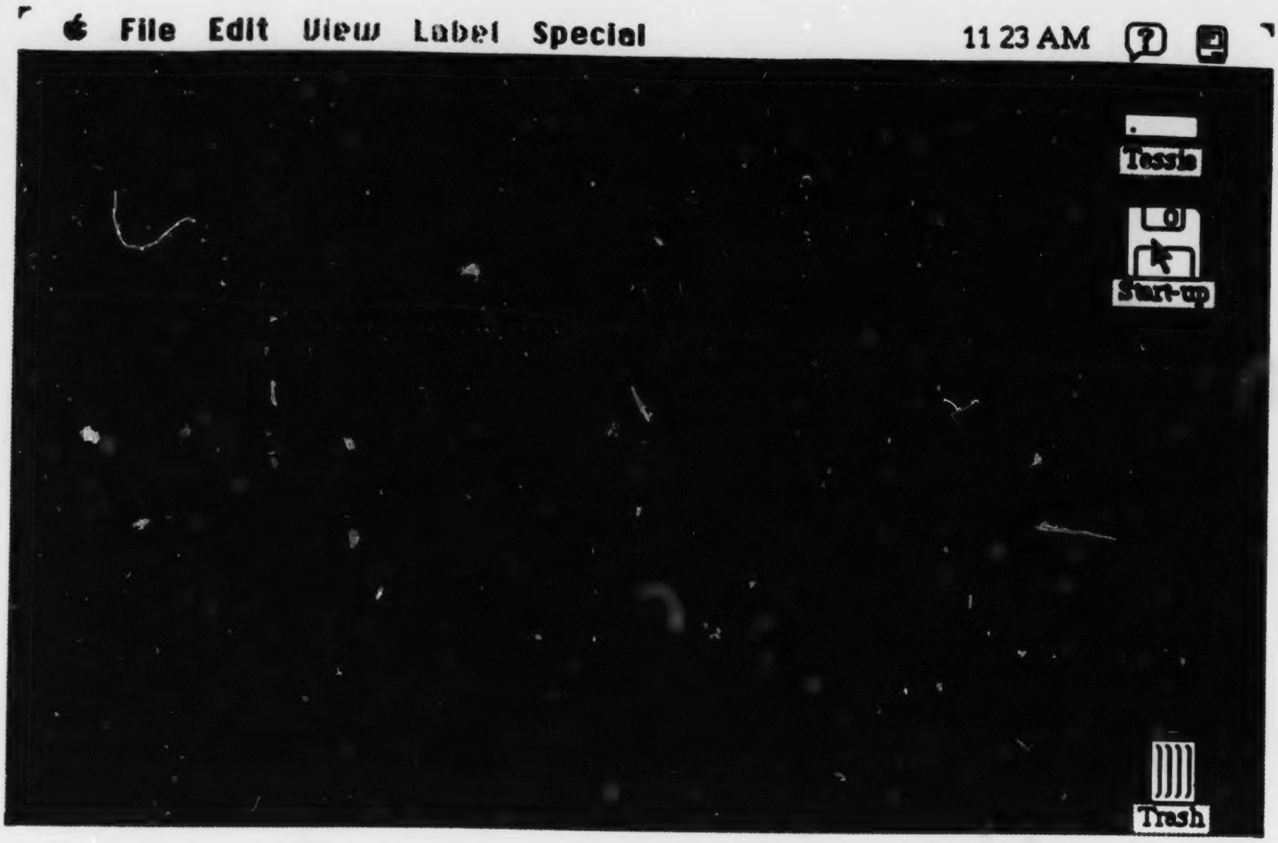
```
Personal note to  terry / phiadmin / cdc

»

Press:

NEXT   for the next line          SHIFT-NEXT   when finished
BACK   for the previous line      SHIFT-BACK   to exit and not send
EDIT   to change the line         SHIFT-LAB    to insert a line
HELP   for more directions        SHIFT-HELP   to delete lines
                                  SHIFT-DATA   to use regular editor
```

– to send

start Typing your greeting, press Return to go to next Line.

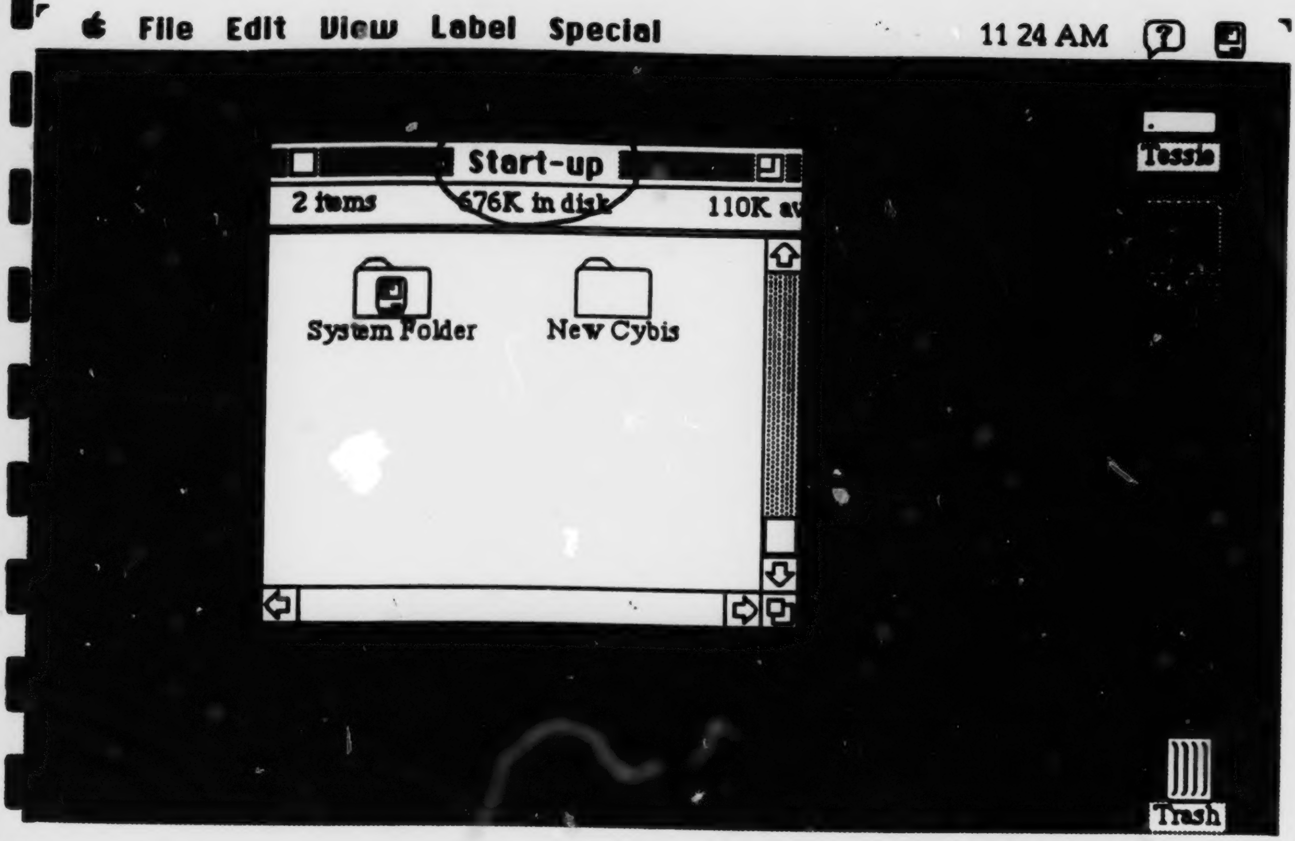
```
Personal note to  terry / phiadmin / cdc

 Hi Terry,

>This is just a test.  I am practicing how to send mail.

Press:

NEXT   for the next line       SHIFT-NEXT   when finished
BACK   for the previous line   SHIFT-BACK   to exit and not send
EDIT   to change the line      SHIFT-LAB    to insert a line
HELP   for more directions     SHIFT-HELP   to delete lines
                               SHIFT-DATA   to use regular editor
```

To send


File
Edit
View
Label
Special
11 23 AM
Tessie
Start-up
Trash

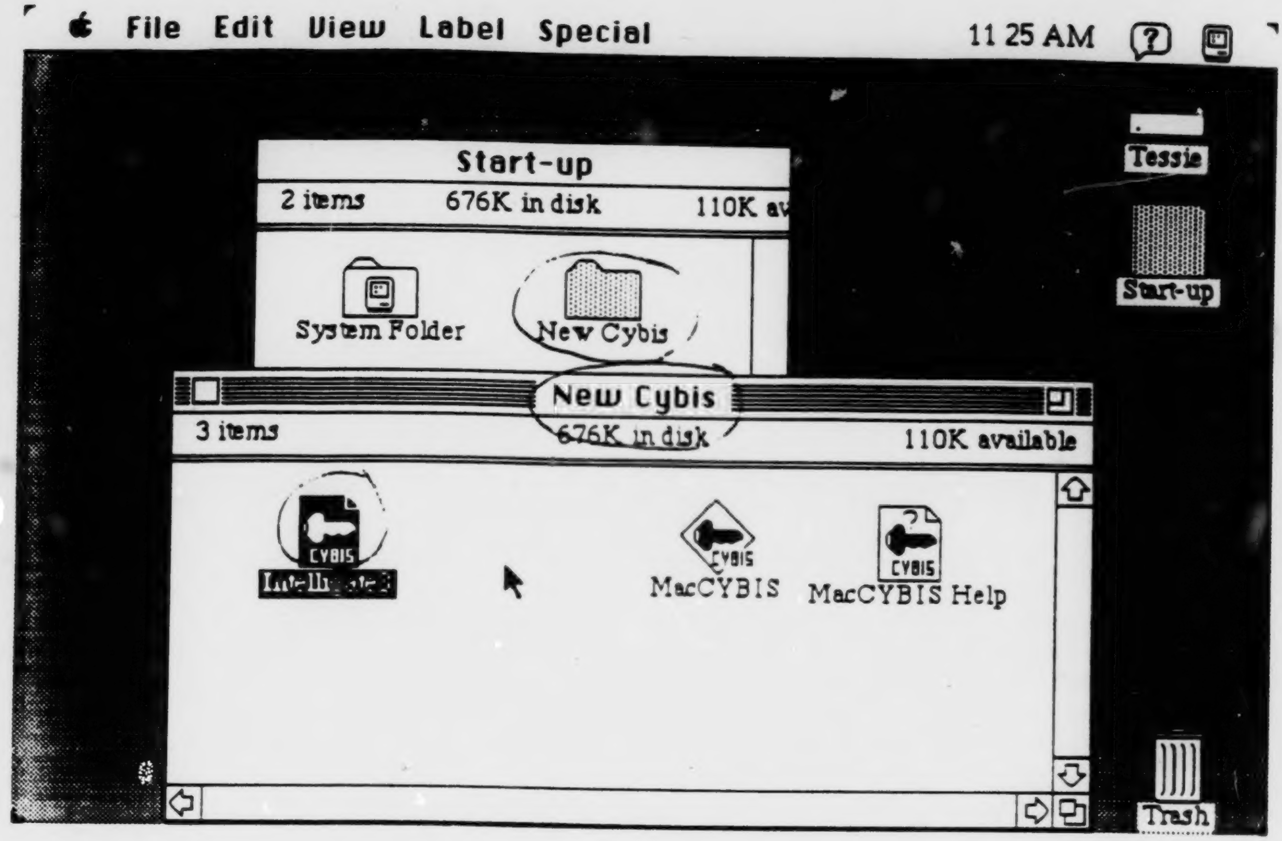
1. Insert the System Start-Up disk into the internal disk drive (the slot in your computer).

2. Click two times (double-click) on the start-up disk icon (picture) and open the disk window.


File
Edit
View
Label
Special
11 24 AM
Start-up
2 items
676K in disk
110K av
System Folder
New Cybis
Tessie
Trash

3. After you double-click, a window will appear. The name of this window is the same as the name of your disk. This means that this is the window for your disk.

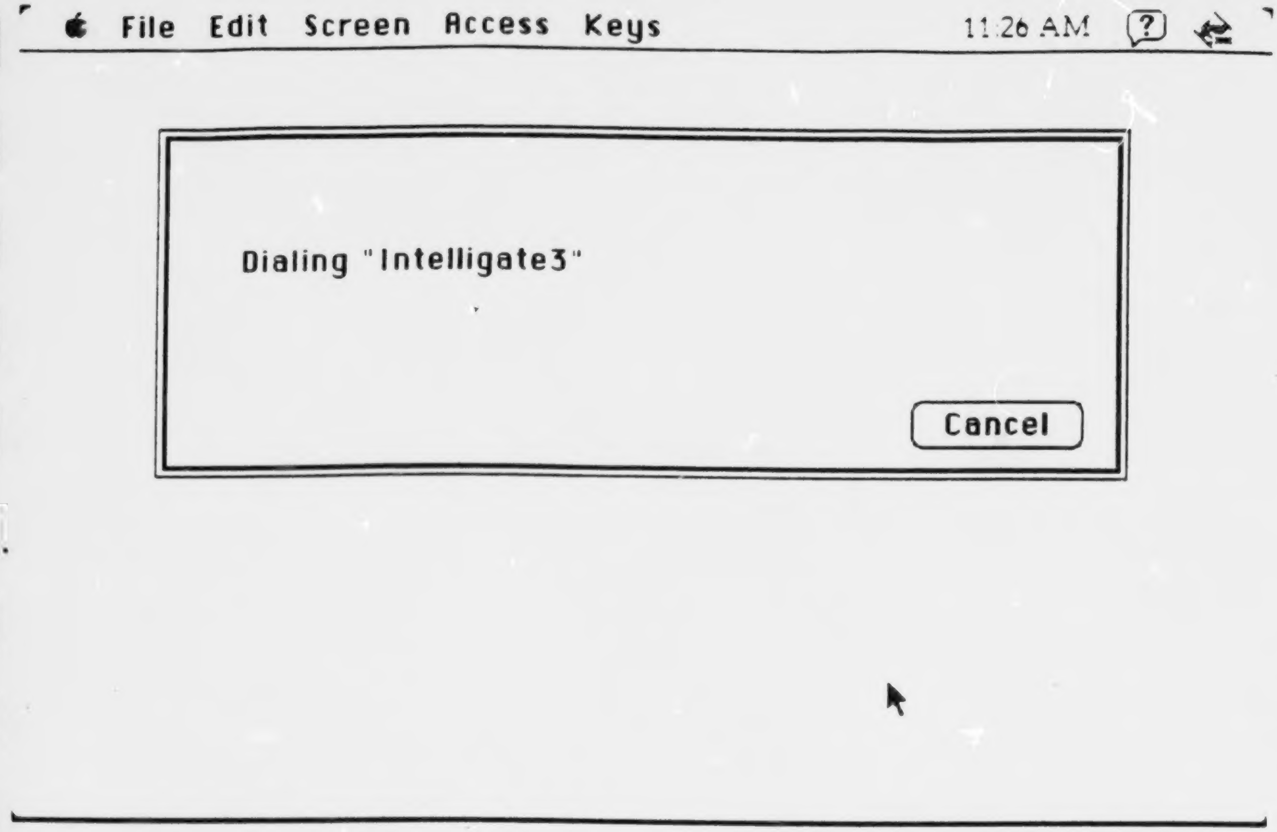
4. Two folders appear in this window. The System Folder, which you NEVER have to open for anything! And the New CYBIS Folder. On this folder, click two times to open its window.


File
Edit
View
Label
Special
11 25 AM
Start-up
2 items
676K in disk
110K av
System Folder
New Cybis
Tessie
Start-up
New Cybis
3 items
676K in disk
110K available
CYBIS
Intelligate3
CYBIS
MacCYBIS
CYBIS
MacCYBIS Help
Trash

5. A window will appear. The name of this window is the same as the name of the folder you just double-clicked on. This means that this is the window for that folder.

6. In this window, 3 items or documents will appear. The ONLY one that you EVER click on is the one called Intelligate3.

7. Double-click on the icon (picture) of the Intelligate 3 document.


File
Edit
Screen
Access
Keys
11:26 AM
?
Cancel

Dialing "Intelligate3"

8. At this point you should get a message that the program is dialing Intelligate3.

9. Do absolutely nothing until your screen comes to a full stop for at least 10 seconds.

```
[H[J1H1
     [12C(0[1maaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
                                                    [32Da  [0m`[1mIMSATT
 EDUCATIONAL NETWORK[0m`  [1ma
                                   [32Daaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
a
lqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqk
x(BPlease review the following before connecting to the Service:
(0x
x[61Cx
x(B[0mAccess to the [1mIMSATT EDUCATIONAL NETWORK [0mis free to
selected (0[1mx
x(B[0msubscribers.[49C(0[1mx
x(B[0mFree access is limited to a maximum 45 hours of use.  Plea
se (0[1mx
x(B[0mPlease keep track of your time!!![28C(0[1mx
x[61Cx
x(B[0mWhen you want to exit from the [1mIMSATT EDUCATIONAL NETWO
RK[4C(0x
x(B[0mtype [1mEXIT [0mand press [1mENTER[0m.[35C(0[1mx
mqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqj

(BPlease enter one of the following:

(0lqqqwqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqk
x(B[0;7m 1 [1C(0[0;1mx  (B[0mTo connect to the service[9C(0[1mx
x(B[0;7m 2 [1C(0[0;1mx  (B[0mTo return to the Main Menu[8C(0[1mx

mqqqvqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqj (B[0m
[24;1H_
```

blinking cursor

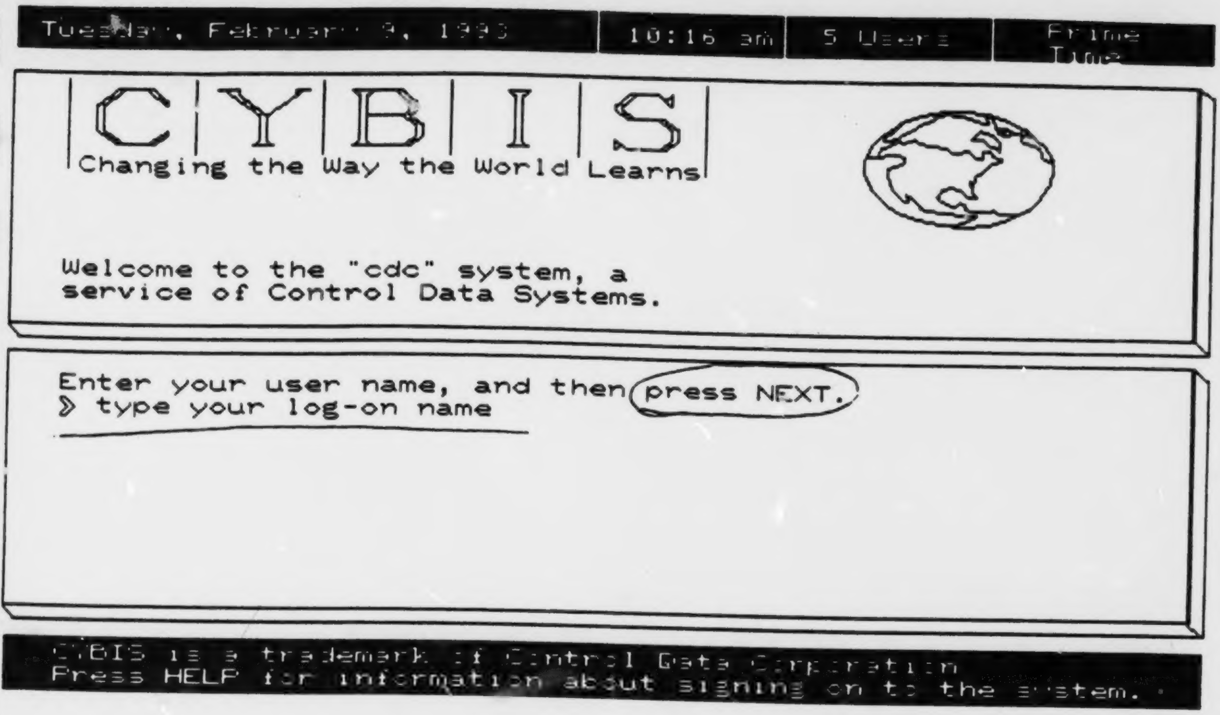
10. Once your screen has stopped, it will look like the screen above. The last line of your screen will say: [24; 1H_

↑

This is the
BLINKING CURSOR!!

11. Wait for the blinking cursor to appear, and then:

- Press the number one key (1).
- Press the Next key (Return).
- Wait about 5-10 seconds to see if your screen begins to move. Be Patient!!
- If the screen does not move, press Next again.



Tuesday, February 9, 1993 | 10:16 am | 5 Users | Prime Time

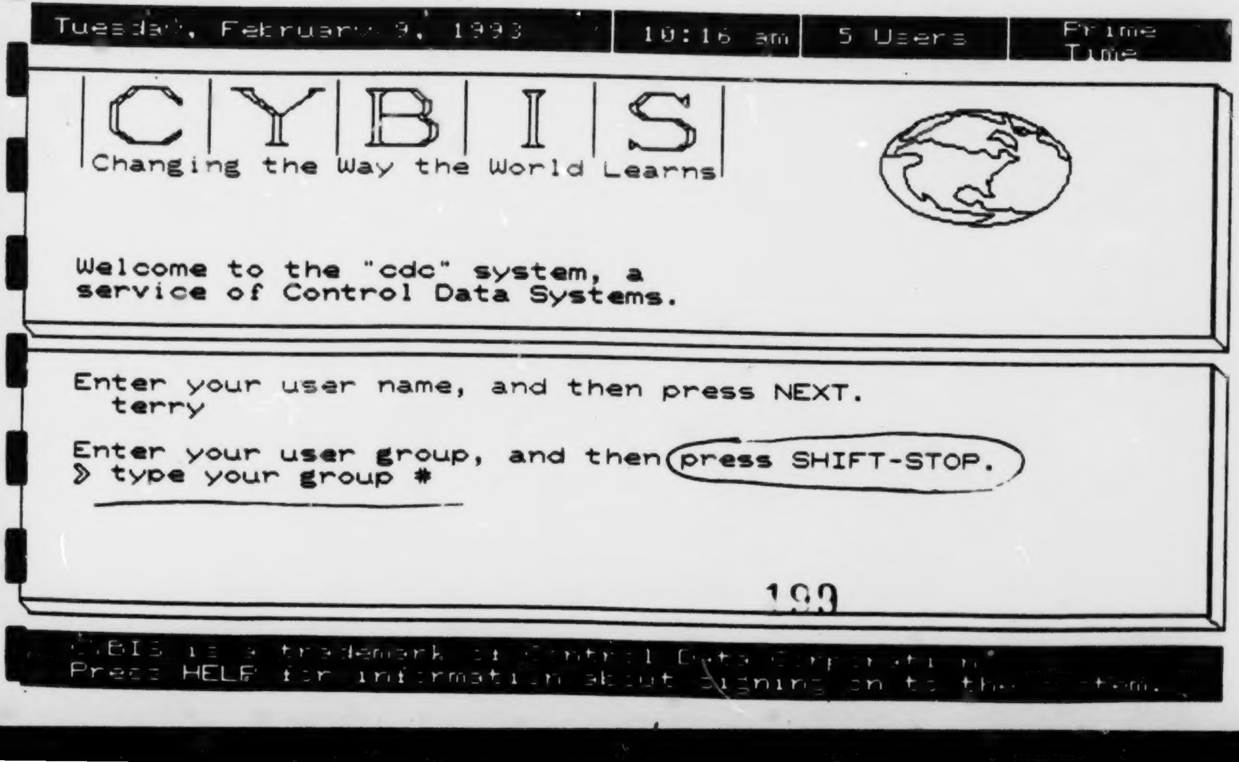
CYBIS

Changing the Way the World Learns

Welcome to the "cdc" system, a
service of Control Data Systems.

Enter your user name, and then press NEXT.
» type your log-on name

CYBIS is a trademark of Control Data Corporation
Press HELP for information about signing on to the system.



Tuesday, February 9, 1993 | 10:16 am | 5 Users | Prime Time

CYBIS

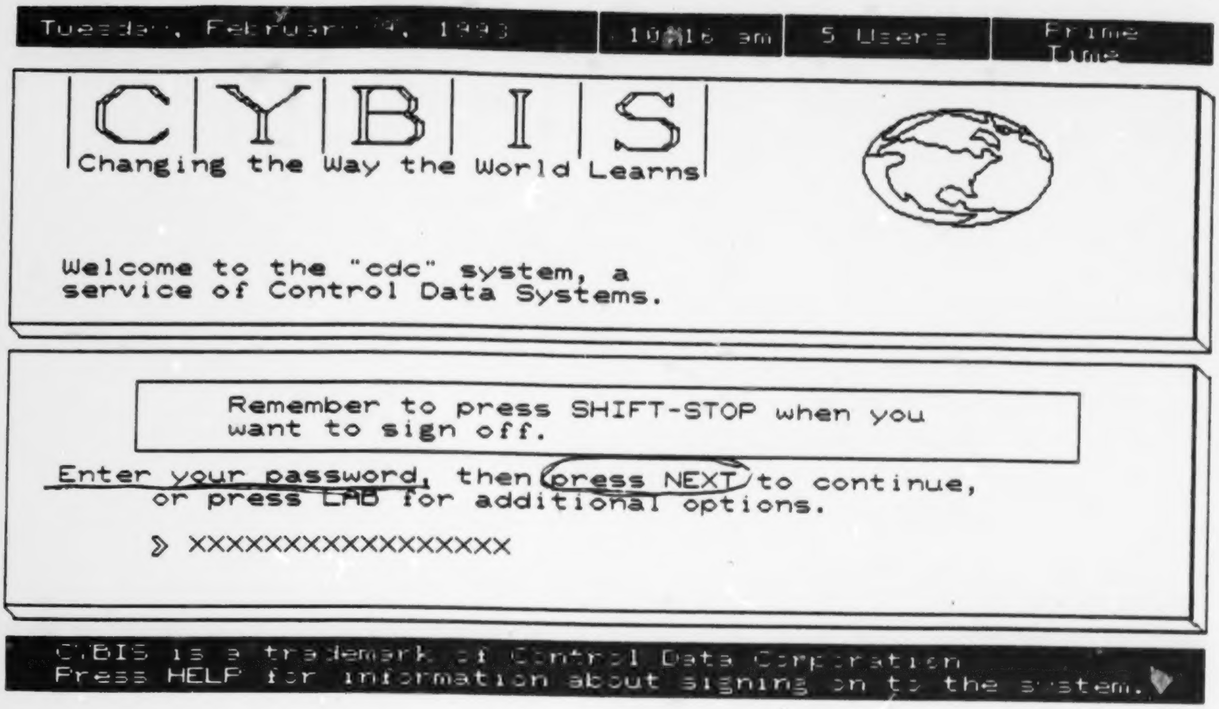
Changing the Way the World Learns

Welcome to the "cdc" system, a
service of Control Data Systems.

Enter your user name, and then press NEXT.
terry

Enter your user group, and then press SHIFT-STOP.
» type your group #

CYBIS is a trademark of Control Data Corporation
Press HELP for information about signing on to the system.



Tuesday, February [illegible], 1993 | 10:16 am | 5 Users | Prime Time

CYBIS
Changing the Way the World Learns

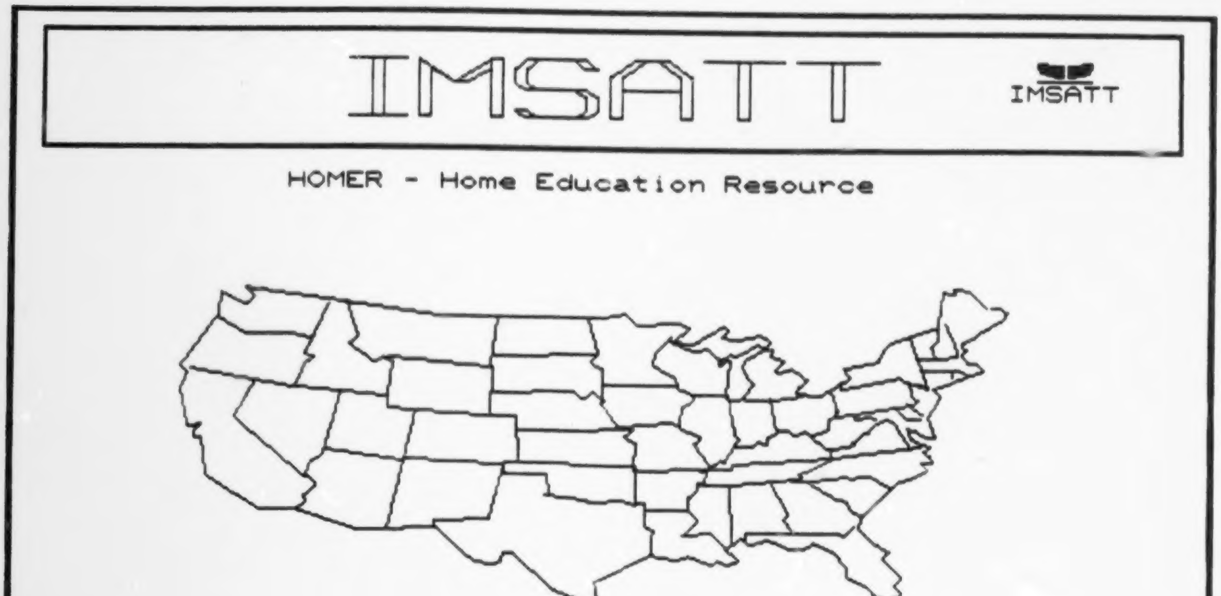
Welcome to the "cdc" system, a
service of Control Data Systems.

Remember to press SHIFT-STOP when you
want to sign off.

Enter your password, then press NEXT to continue,
or press ~~LAB~~ for additional options.

» XXXXXXXXXXXXXXXX

CYBIS is a trademark of Control Data Corporation
Press HELP for information about signing on to the system.



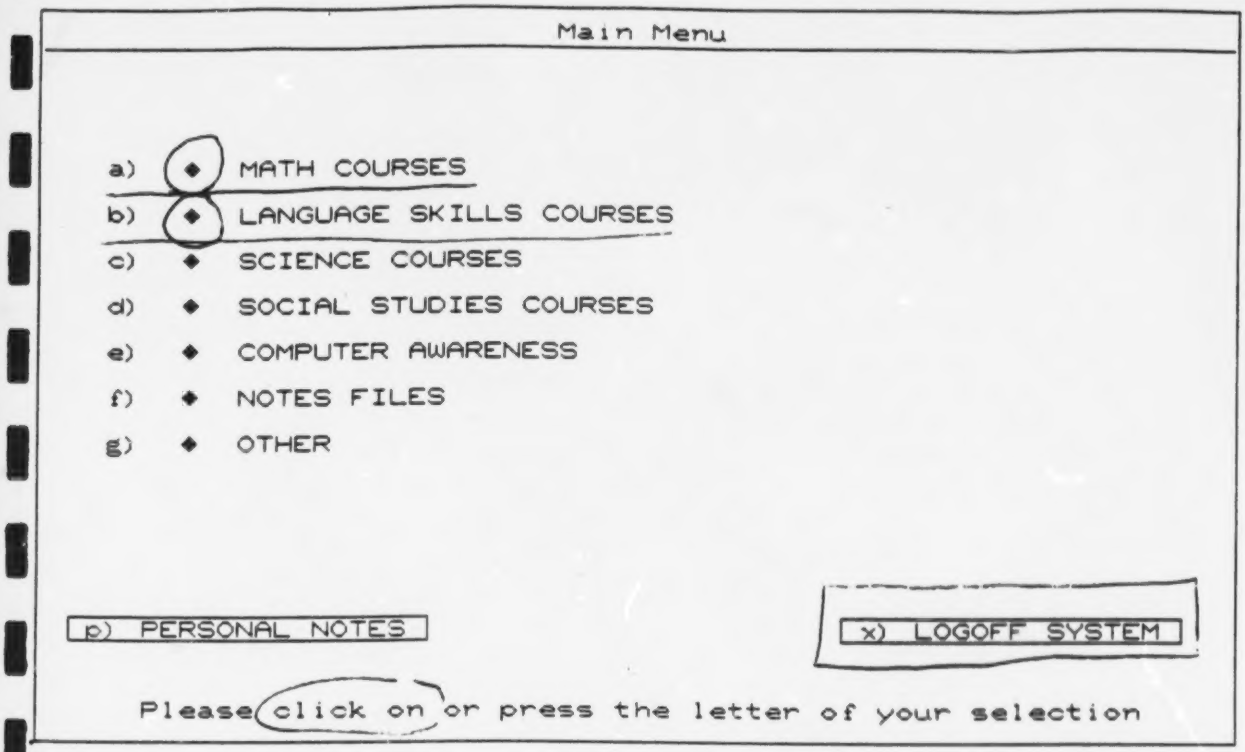
IMSATT

HOMER - Home Education Resource

Copyright IMSATT CORP 1992 (C)
Click on the screen or press NEXT to continue

200

1


Main Menu
a) ◆ MATH COURSES
b) ◆ LANGUAGE SKILLS COURSES
c) ◆ SCIENCE COURSES
d) ◆ SOCIAL STUDIES COURSES
e) ◆ COMPUTER AWARENESS
f) ◆ NOTES FILES
g) ◆ OTHER
p) PERSONAL NOTES
x) LOGOFF SYSTEM

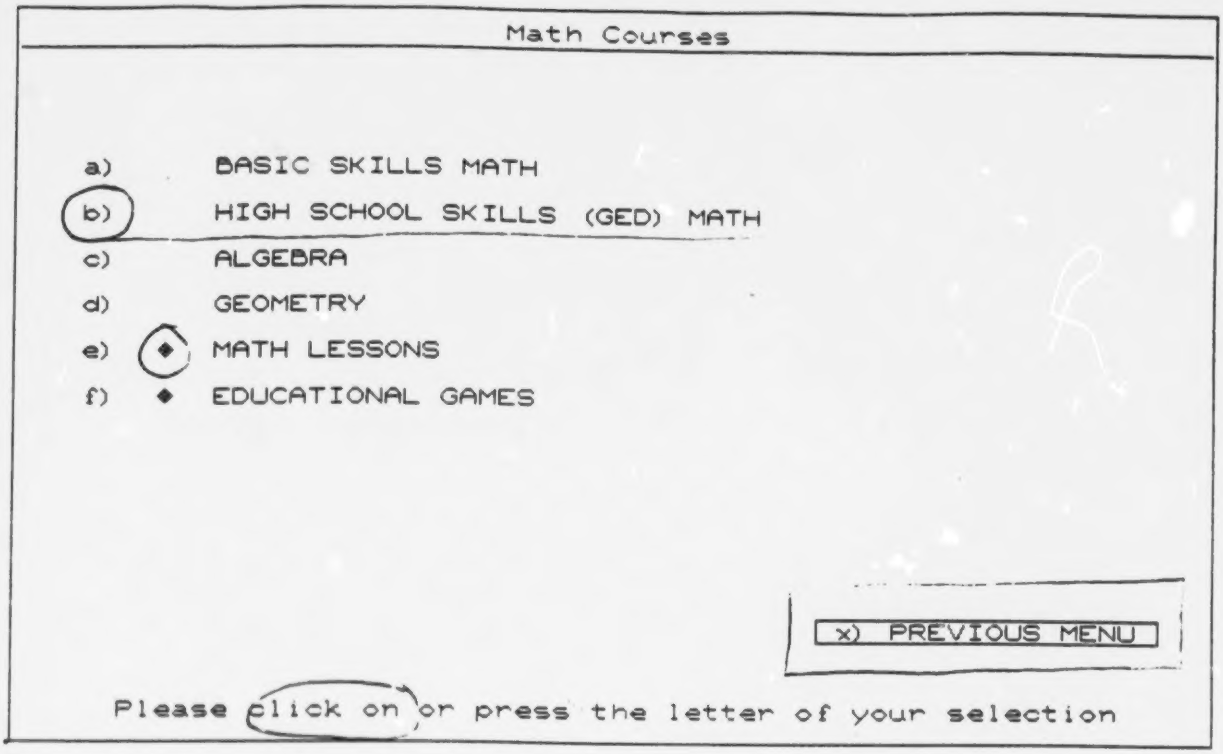
Please click on or press the letter of your selection

1. This is the MAIN MENU. This is where you begin and this is where you will end or quit.

2. On Thursday night from 6-8:30 you will be logged on to this CYBIS curriculum. You will work for 1 hour and 15 minutes on Math (a), and 1 hour and 15 minutes on Language Skills (b).

3. This leaves 7 1/2 hours for you to do any of the other things listed at other times convenient to you (except Thursday night from 6-8:30!)

4. Let's pretend for the moment that we want to do the Math. We would click one time anywhere on the Math Courses line. This will take you to a SUB-MENU.



Math Courses

a) BASIC SKILLS MATH

[✓ b)] HIGH SCHOOL SKILLS (GED) MATH

c) ALGEBRA

d) GEOMETRY

e) ◆ MATH LESSONS

f) ◆ EDUCATIONAL GAMES

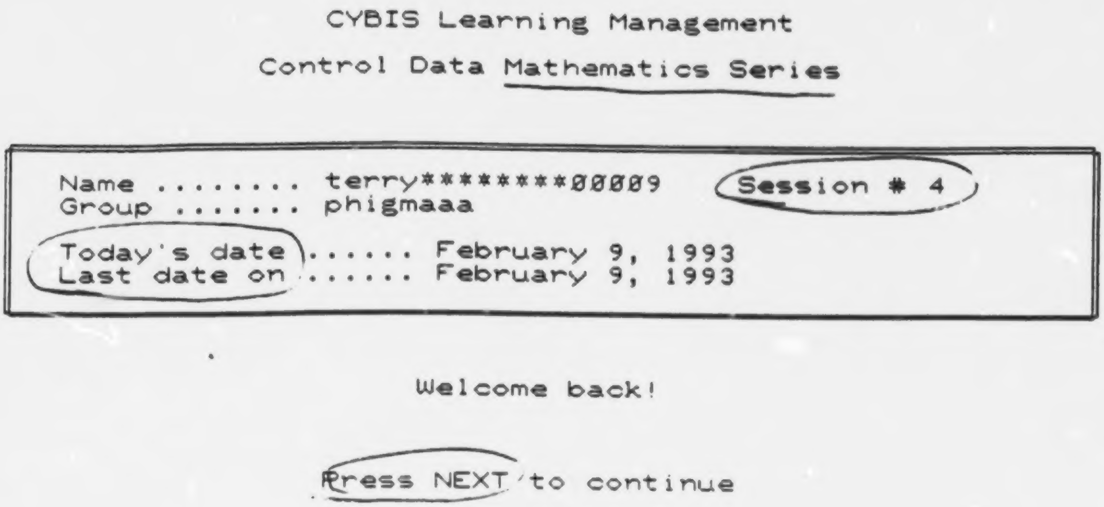
x) PREVIOUS MENU

Please click on or press the letter of your selection

5. This is the SUB-MENU for the Math Courses. On Thursday night, you will choose selection B) GED Math.

6. By the way, if there is a diamond between the letter and the name of the menu selection, it means that there is another sub-menu available for that choice.

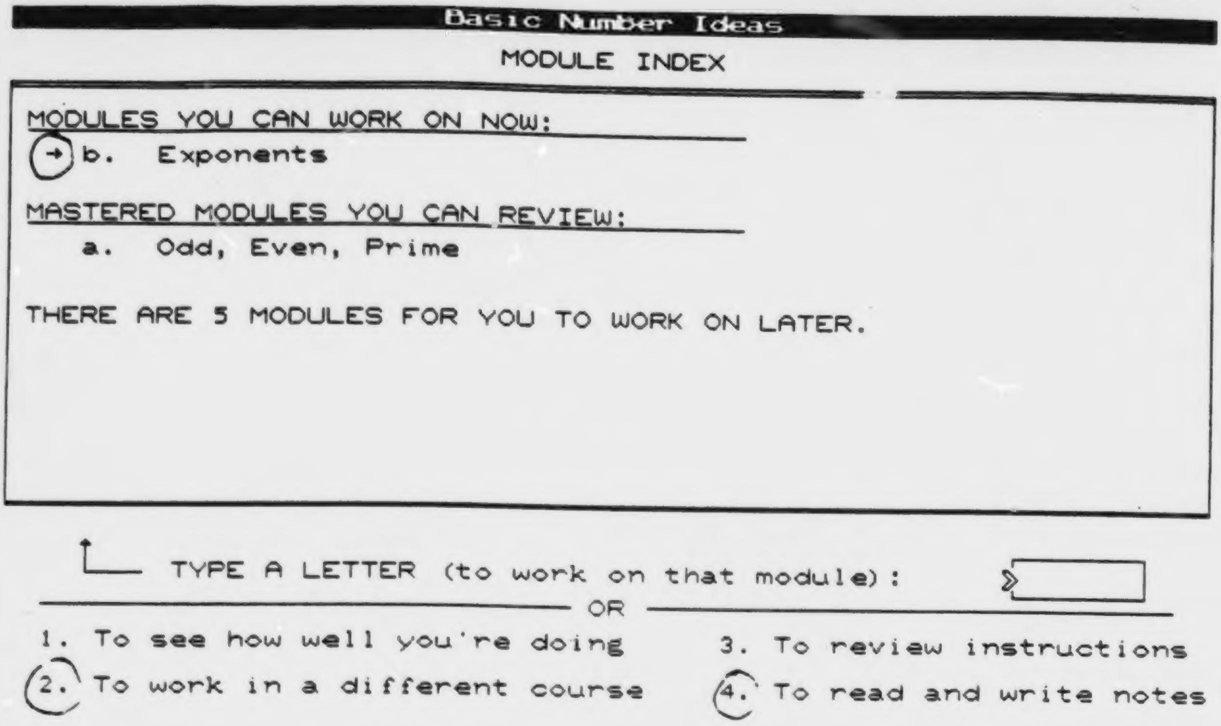
9



```
                CYBIS Learning Management
           Control Data Mathematics Series

 Name ........ terry********00009    Session # 4
 Group ....... phigmaaa

 Today's date ...... February 9, 1993
 Last date on ...... February 9, 1993

                    Welcome back!

               Press NEXT to continue
```

7. If you have NEVER worked on this before, you will NOT get the above screen. However, if you have already begun work in this Math Course, you will more than likely get the above screen.

8. This screen gives you statistics of your use of the course. It tells you that this is the fourth session in the Math Course that you have taken. It also tells you today's date and the date that you last worked on this Math Course.



Basic Number Ideas

MODULE INDEX

MODULES YOU CAN WORK ON NOW:

[✓ →] b. Exponents

MASTERED MODULES YOU CAN REVIEW:

a. Odd, Even, Prime

THERE ARE 5 MODULES FOR YOU TO WORK ON LATER.

TYPE A LETTER (to work on that module): > ☐

OR

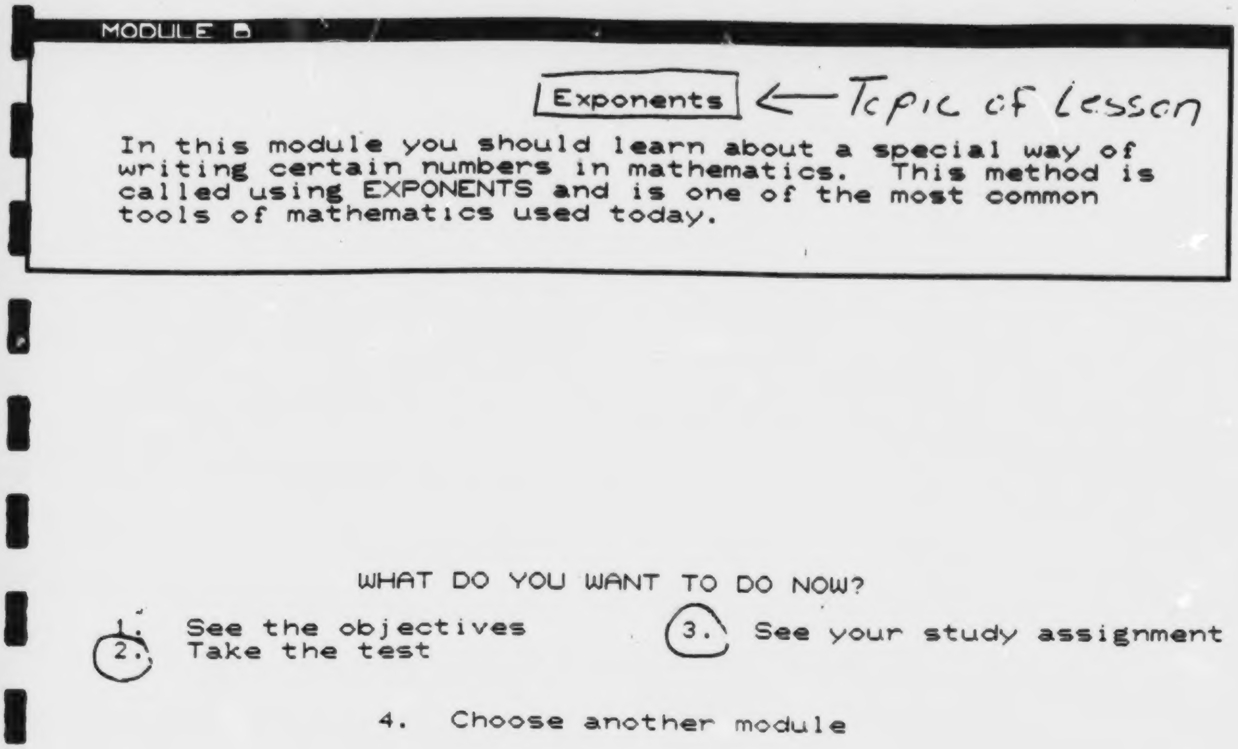
1. To see how well you're doing
[✓ 2.] To work in a different course
3. To review instructions
[✓ 4.] To read and write notes

9. This is a very important screen, it askes you what you want to do next.

10. If you want to work on Exponents (please note the arrow, this means you should choose this lesson first) just type the letter B or the letter the arrow is pointing to.

11. To quit and not do anything, type the number 2 which will take you back to either the sub-menu or the main menu.

12. You also have the option to read your personal notes or to write a pnote to someone. If you wanted to do that, you would press 4.



MODULE 8

Exponents ← Topic of lesson

In this module you should learn about a special way of writing certain numbers in mathematics. This method is called using EXPONENTS and is one of the most common tools of mathematics used today.

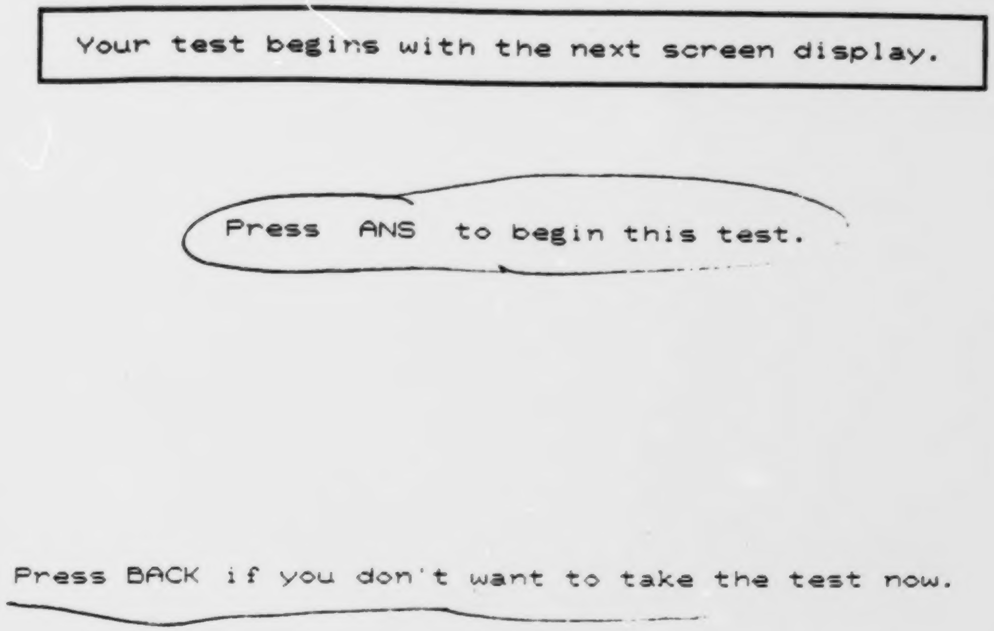
WHAT DO YOU WANT TO DO NOW?

1. See the objectives
[✓ 2.] Take the test
[✓ 3.] See your study assignment
4. Choose another module

13. If you chose to do an exercise, you will get a screen similar to the one above.

14. If you have never done this particular activity before, TAKE THE TEST (2). This is not the original placement test which you took when you first logged on. This is a test just on the topic of the lesson. You should take this test so the program can decide exactly what you have to learn about the topic.

15. If you do not pass the test (do not master it), then choose 3 from the menu to see your study assignment. However, if you do pass or master this test, you will be taken to the next topic and must again take the test because it is a new topic. You might get lucky and master that test too.



```
Your test begins with the next screen display.

Press  ANS  to begin this test.

Press BACK if you don't want to take the test now.
```

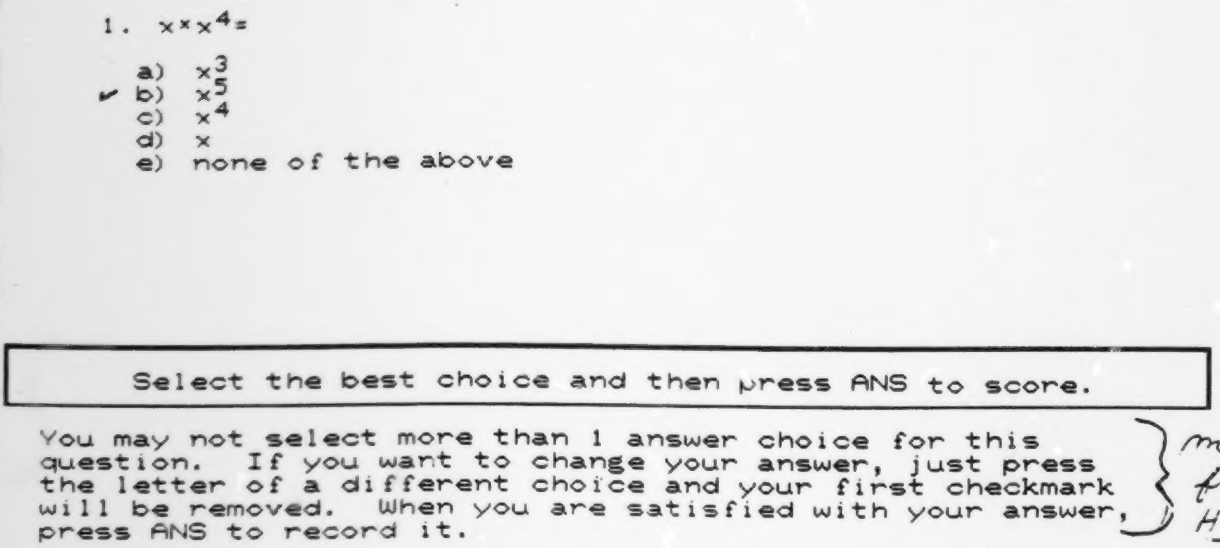
16. If you decided to take the test, you will get the above screen.

17. To begin the test press Command-A (Answer). You also use this command during the test.

18. If you do not want to take the test now, pess Command-B (Back).

19. If you want to quit the system, press Shift-Command-S (Shift-Stop) to take you back to the MAIN MENU.

DO NOT JUST TURN OFF YOUR COMPUTER, YOU MUST LOG OFF THE SYSTEM CORRECTLY FOR THE COMPUTER TO RECORD YOUR WORK STATISTICS.



1. $x*x^4=$

a) x^3
✓ b) x^5
c) x^4
d) x
e) none of the above

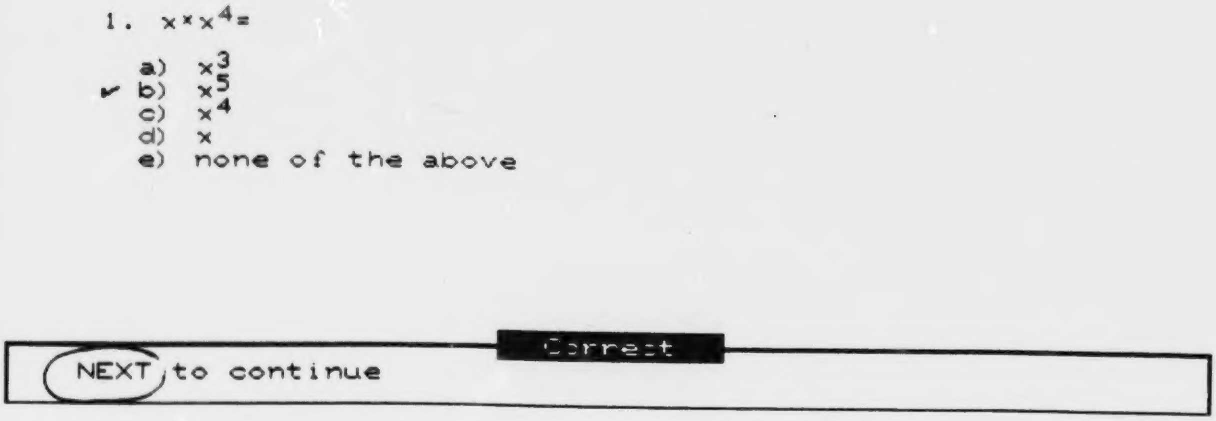
Select the best choice and then press ANS to score.

You may not select more than 1 answer choice for this question. If you want to change your answer, just press the letter of a different choice and your first checkmark will be removed. When you are satisfied with your answer, press ANS to record it.

message from Help

20. This is the first screen of the test. Take a few minutes to figure out the correct answer. In this instance the correct answer is b) x^5 so I would press the B key and a check mark will appear next to ~~your~~ the selection.

21. If you need help, press Command-H (Help) and the message above appear.



1. $x*x^4=$

a) x^3

✓ b) x^5

c) x^4

d) x

e) none of the above

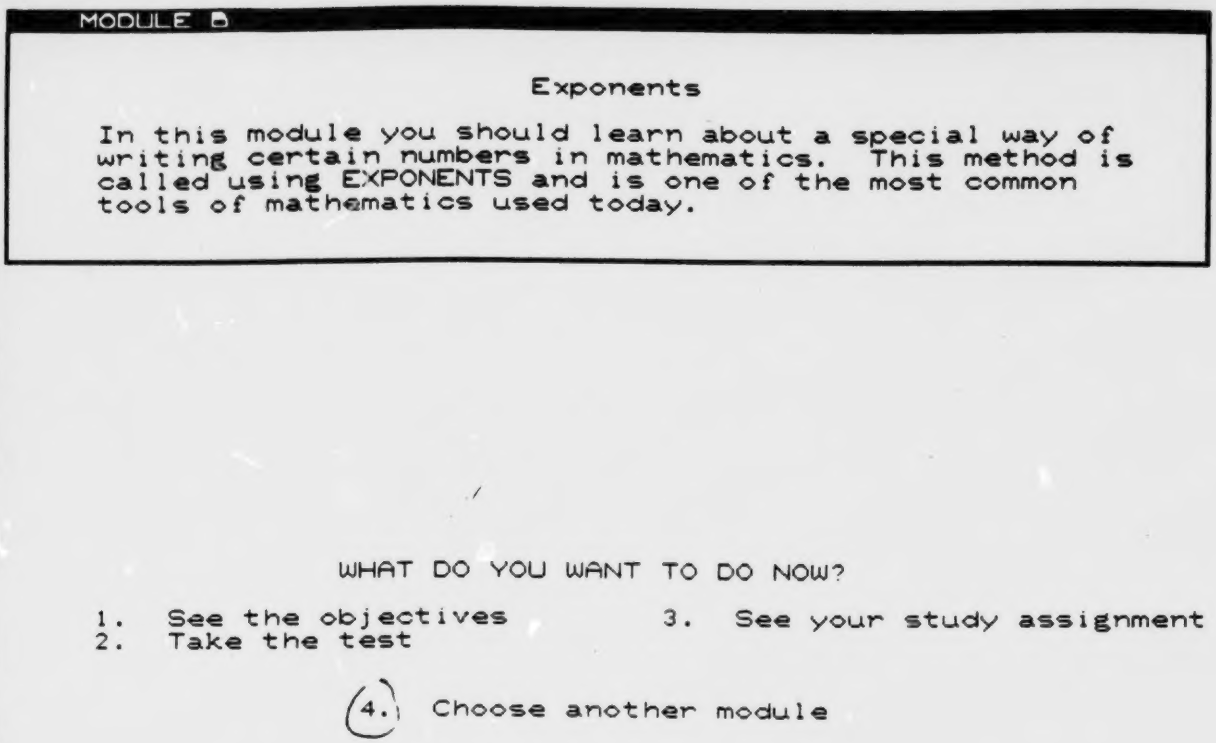
Correct

NEXT to continue

22. One you have selected the correct answer, you must immediately press Command-A (Answer) for the computer to record your answer choice.

23. Press Next (Return) to go to the next question.

24. To quit, press Shif-Command-S (Shift-Stop). REMEMBER: You will not get credit for your work if you quit before you are finished!



MODULE B

Exponents

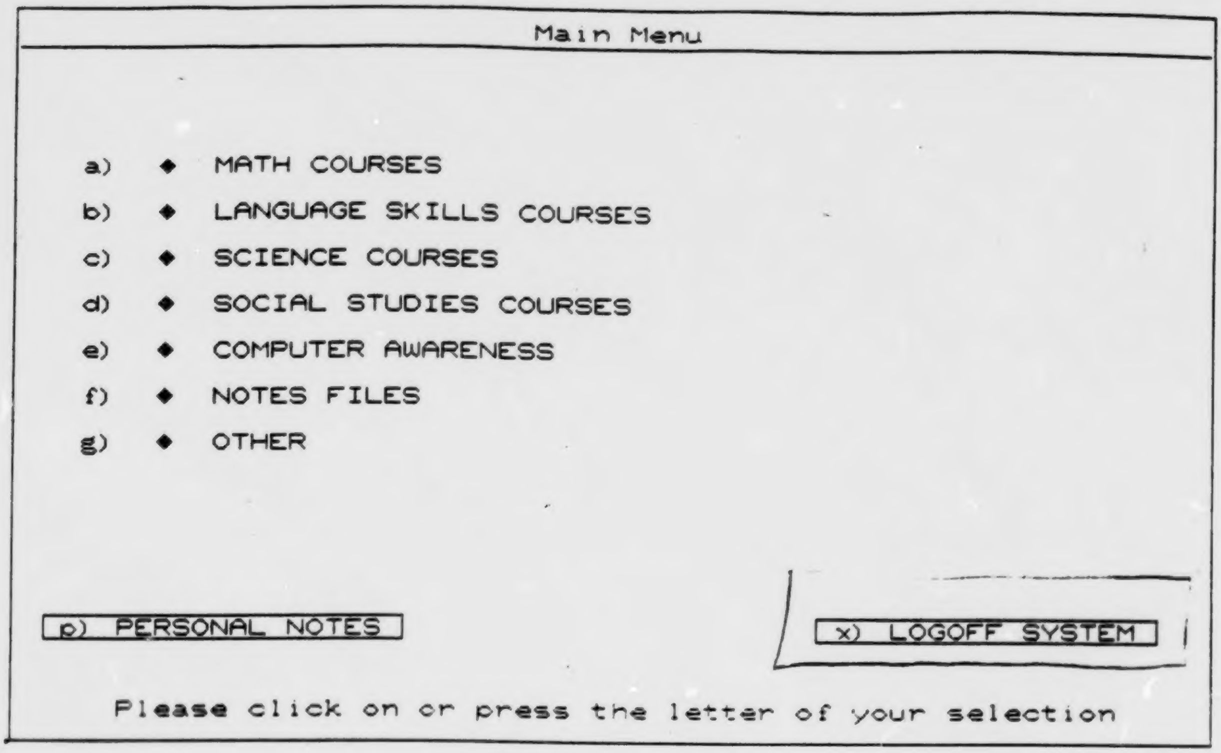
In this module you should learn about a special way of writing certain numbers in mathematics. This method is called using EXPONENTS and is one of the most common tools of mathematics used today.

WHAT DO YOU WANT TO DO NOW?

1. See the objectives
2. Take the test
3. See your study assignment
[✓ 4.] Choose another module

25. If you decided to quit, you will get a screen similar to the one above.

26. Choose number 4 to go back to the SUB or the MAIN MENU.



Main Menu

a) ◆ MATH COURSES
b) ◆ LANGUAGE SKILLS COURSES
c) ◆ SCIENCE COURSES
d) ◆ SOCIAL STUDIES COURSES
e) ◆ COMPUTER AWARENESS
f) ◆ NOTES FILES
g) ◆ OTHER

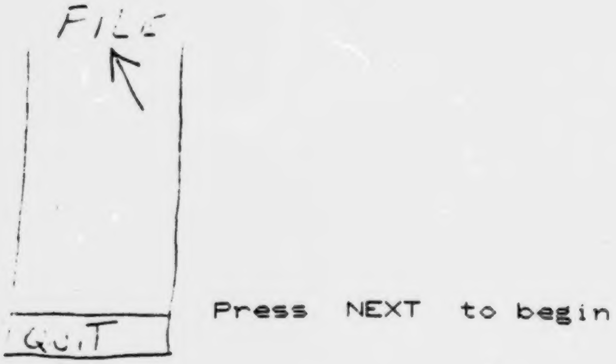
p) PERSONAL NOTES

x) LOGOFF SYSTEM

Please click on or press the letter of your selection

27. At this point you will either choose something else to do from either the sub or main menu, or you will LOGOFF SYSTEM.

28. To logoff system, click once on selection x)LOGOFF SYSTEM.



29. This should be your final screen. But you are not done!

30. Before turning off your computer, go to the FILE Menu with your arrow and click and hold. Slide down the menu and choose QUIT.

31. You will then get a message asking you if you want to Hang up the Phone? Click the OK Button.

32. To shut down your computer, you must go to the SPECIAL MENU and choose SHUT DOWN. Now you can turn off your computer, modem and the lights and go to sleep!

Drexel University's
Office of Computing Services
Community Outreach Activities
Korman Center
33rd and Chestnut Streets
Philadelphia, PA 19104-2884

Terry Martell: 215/895-6753 Fax: 215/895-6777

January 8, 1993

Dear Power Learning Project Participant:

As you know, the deadline of January 4th has come and gone and unfortunately learners still cannot access CYBIS from their homes. Please review the information below which will help to expedite this process.

The Steps Currently in Progress

- Bell Atlantic is currently setting up a phone access system to allow your learners to call the CYBIS System with a special phone number (please do not give students the 1-800 number).
- Please send the Mayor's Commission on Literacy the names, addresses, and phone numbers of your learners. This step must be done before any learners can use the system from home.
- Control Data Corp. will develop a configuration file which will help the access software run smoothly.
- Drexel will distribute one disk copy of the new access software to you for distribution to your learners. We will contact you by phone to arrange distribution as soon as we receive the new software.

Additional Things You Can Do

- All of the instructors (using the **phiadmin** sign-on) have the ability to access a curriculum catalog found in the Catalog menu. This catalog gives you a chance to review curriculum which is currently not available to your learners.
- If you find curriculum that you think would be helpful to your learners and would like it to be included in the student lesson menu, make note of the lesson name and file name and give me a call. Control Data Corp. will add it to a special menu and your learners can access it at any time.

- Enclosed is a list of 53 curriculum items which have been identified for the student menu. These items consist of games, simulations, math strategies, writing skills curriculum, and life skills programs.

- To review these items just type the file name at the **What Lesson >** prompt of the main screen. Or you may review others from the catalog and ask to have them included. Please take some time to do this because it is a way for you to have input into the lessons your learners can use during their studies.

If you have any questions about the above information, please feel free to call me at the above number or Ben Burenstein at 895-1282.

Sincerely yours,

Terry Martell,
Program Specialist

DREXEL
UNIVERSITY
Office of Computing Services
Drexel University
Philadelphia, PA 19104-2884
215/895-1282

Power Learning Project

Teacher's Meeting

Feb. 18, 1993

Mayor's Commission on Literacy
1500 Walnut St., 18th Floor
Philadelphia, PA 19102
(215) 875-6602

I. Introductions and overall comments on how the project is going

A. DOS-based courseware coming early next week.

B. How are the machines working?

II. Login problems: *70 in the login screen, autologin, waiting, others

III. Seeing learners' results:

A. Data from entire group: type "phi0000*" at "What lesson?" prompt, type 3 for Statistics, click on "Data," press <Return> for next, type a (for individual records), press <Return> for next (see illustration 1)

B. Data from individuals: type "philuse" at "What lesson?" prompt, put in name of group (phi0000X), put in an individual's name or just press **shift-next** (shift <Return>) to see everyone's individual records: (see illustrations 2 and 3)

C. To see learners currently on the system, type "philusers" at "What lesson?" prompt and then press <Return>. (see illustrations 4 and 5)

IV. Communications using the bulletin board

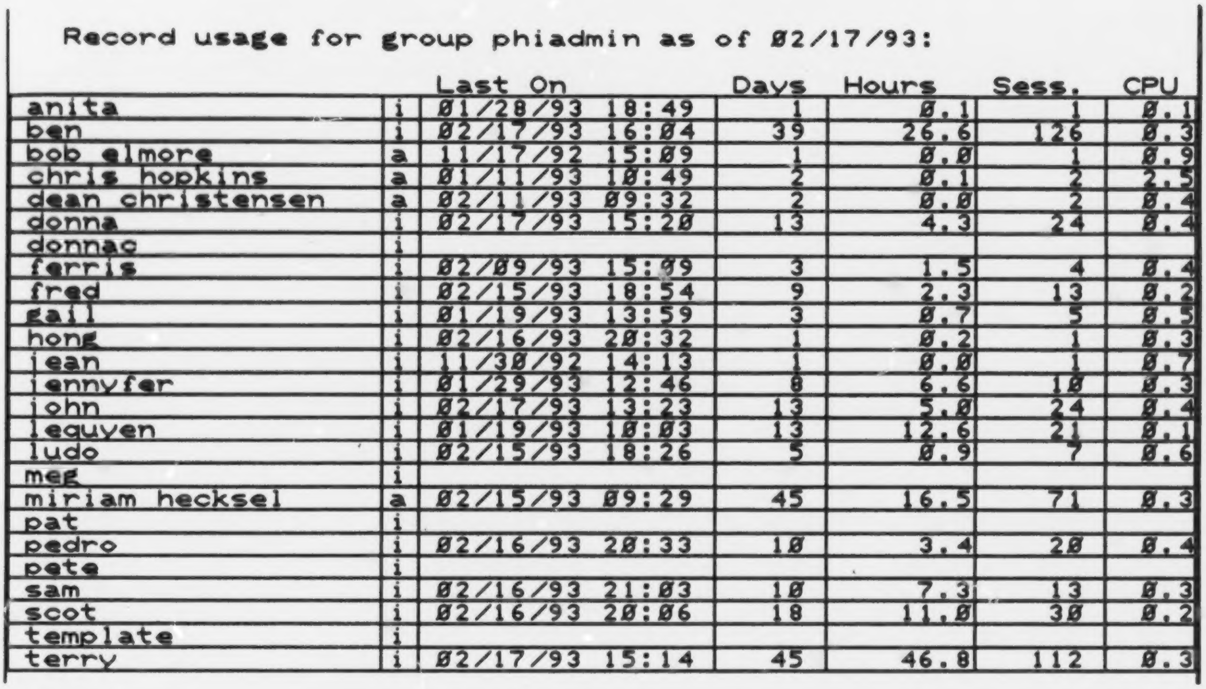
A. Type "drexcdsi" for notes directly related to this project. Please sign on and read these notes at least twice per week. We will have information that will be useful to everyone. Feel free to post your feelings, and engage in dialog with others about what you are experiencing with Imsatt. (see illustrations 6-8)

B. Under your student sign-in there is a Notes for Literacy section. Check it out.

V. Welfare Payments

VI. More extensive feedback from users, student results, Next session at Drexel?

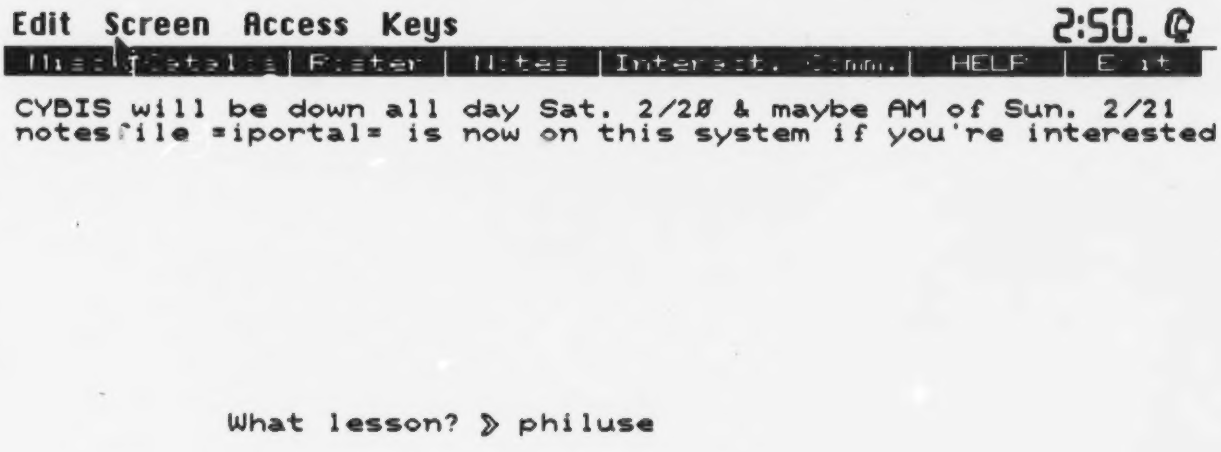
Illustration 1 group records



Record usage for group phiadmin as of 02/17/93:

		Last On	Days	Hours	Sess.	CPU
anita	i	01/28/93 18:49	1	0.1	1	0.1
ben	i	02/17/93 16:04	39	26.6	126	0.3
bob elmore	a	11/17/92 15:09	1	0.0	1	0.9
chris hopkins	a	01/11/93 10:49	2	0.1	2	2.5
dean christensen	a	02/11/93 09:32	2	0.0	2	0.4
donna	i	02/17/93 15:20	13	4.3	24	0.4
donnac	i					
ferris	i	02/09/93 15:09	3	1.5	4	0.4
fred	i	02/15/93 18:54	9	2.3	13	0.2
gail	i	01/19/93 13:59	3	0.7	5	0.5
hong	i	02/16/93 20:32	1	0.2	1	0.3
jean	i	11/30/92 14:13	1	0.0	1	0.7
jennyfer	i	01/29/93 12:46	8	6.6	10	0.3
john	i	02/17/93 13:23	13	5.0	24	0.4
lequyen	i	01/19/93 10:03	13	12.6	21	0.1
ludo	i	02/15/93 18:26	5	0.9	7	0.6
meg	i					
miriam hecksel	a	02/15/93 09:29	45	16.5	71	0.3
pat	i					
pedro	i	02/16/93 20:33	10	3.4	20	0.4
pete	i					
sam	i	02/16/93 21:03	10	7.3	13	0.3
scot	i	02/16/93 20:06	18	11.0	30	0.2
template	i					
terry	i	02/17/93 15:14	45	46.8	112	0.3

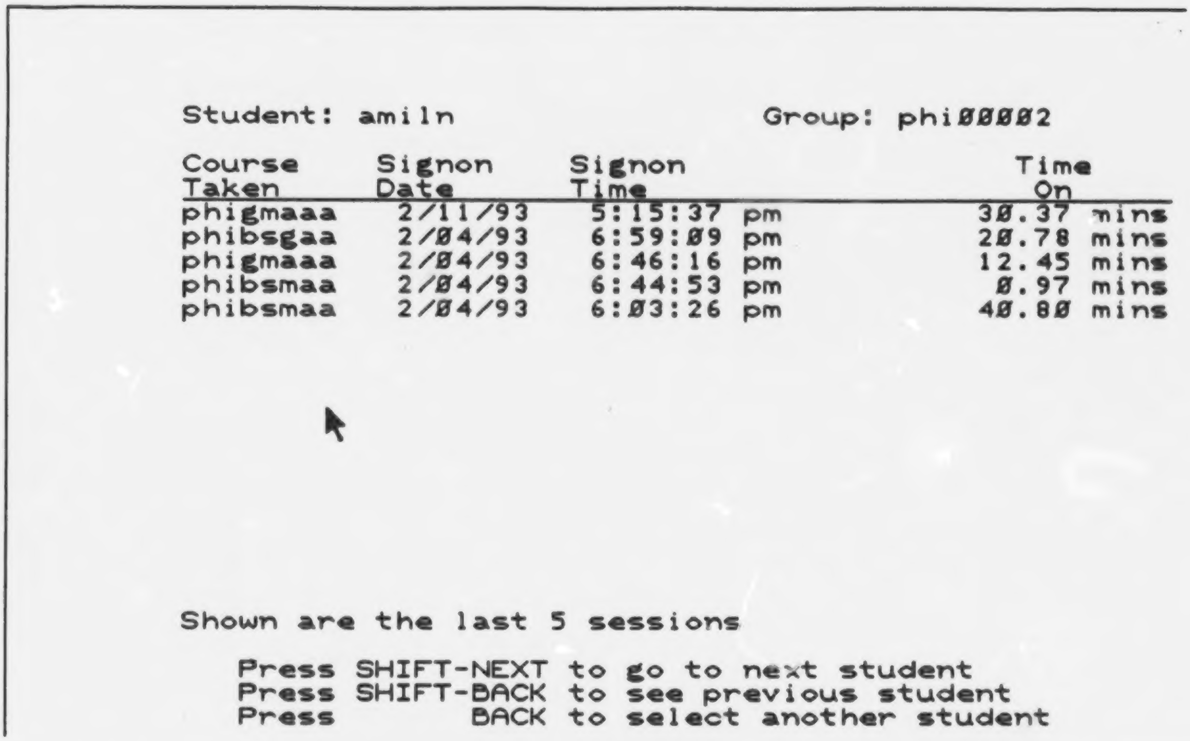
Illustration 2: type =philuse= to get individual records



```
CYBIS will be down all day Sat. 2/20 & maybe AM of Sun. 2/21
notesfile =iportal= is now on this system if you're interested
```

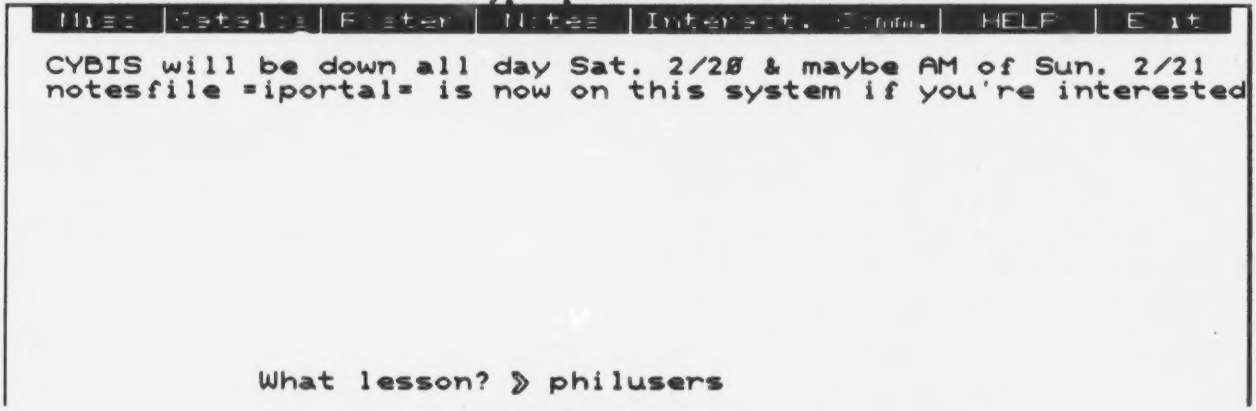
```
What lesson? » philuse
```

Illustration 3: this is an individual student's record



```
Student: amiln                         Group: phi00002

Course     Signon     Signon                        Time
Taken      Date       Time                          On
phigmaaa    2/11/93    5:15:37 pm                  30.37 mins
phibsgaa    2/04/93    6:59:09 pm                  20.78 mins
phigmaaa    2/04/93    6:46:16 pm                  12.45 mins
phibsmaa    2/04/93    6:44:53 pm                   0.97 mins
phibsmaa    2/04/93    6:03:26 pm                  40.80 mins




Shown are the last 5 sessions

   Press SHIFT-NEXT to go to next student
   Press SHIFT-BACK to see previous student
   Press       BACK to select another student
```

Illustration 4: type =philusers= to see who is on

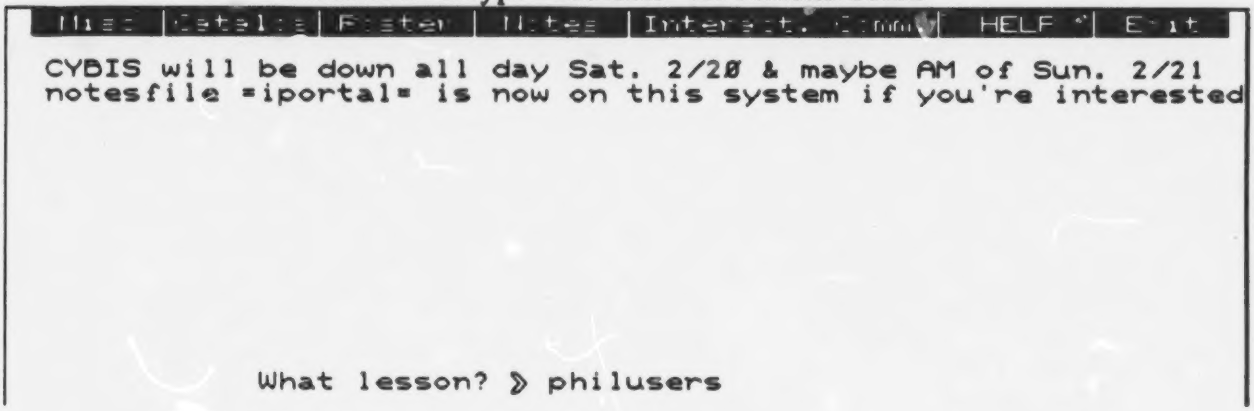


```
CYBIS will be down all day Sat. 2/20 & maybe AM of Sun. 2/21
notesfile =iportal= is now on this system if you're interested




      What lesson? » philusers
```

Illustration 5:

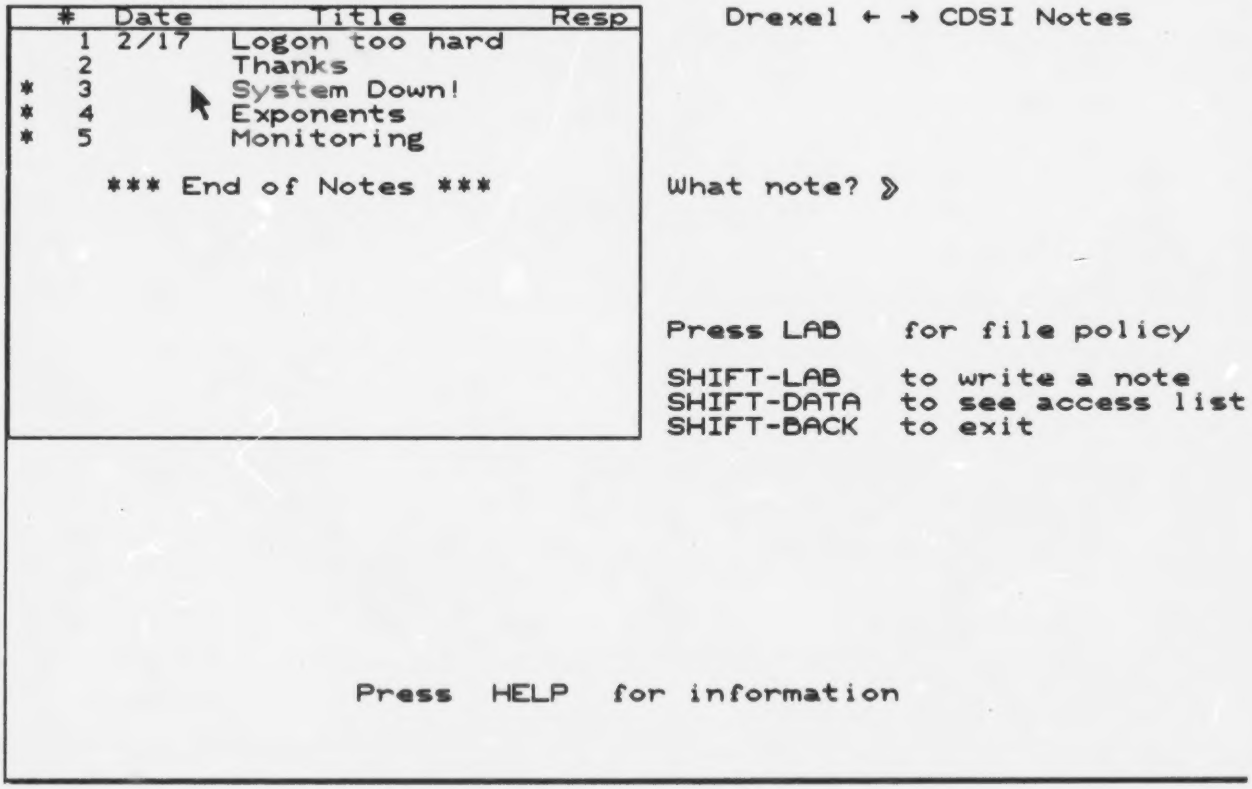
```
              Current users logged in on Philly accounts

NAME                  GROUP          NAME                 GROUP
ben                   phiadmin
mcintyrec****00002    phibsgaa
turnerc*****00001     phibsmaa
```

Illustration 6: type =drexcdsi= for bulletin board



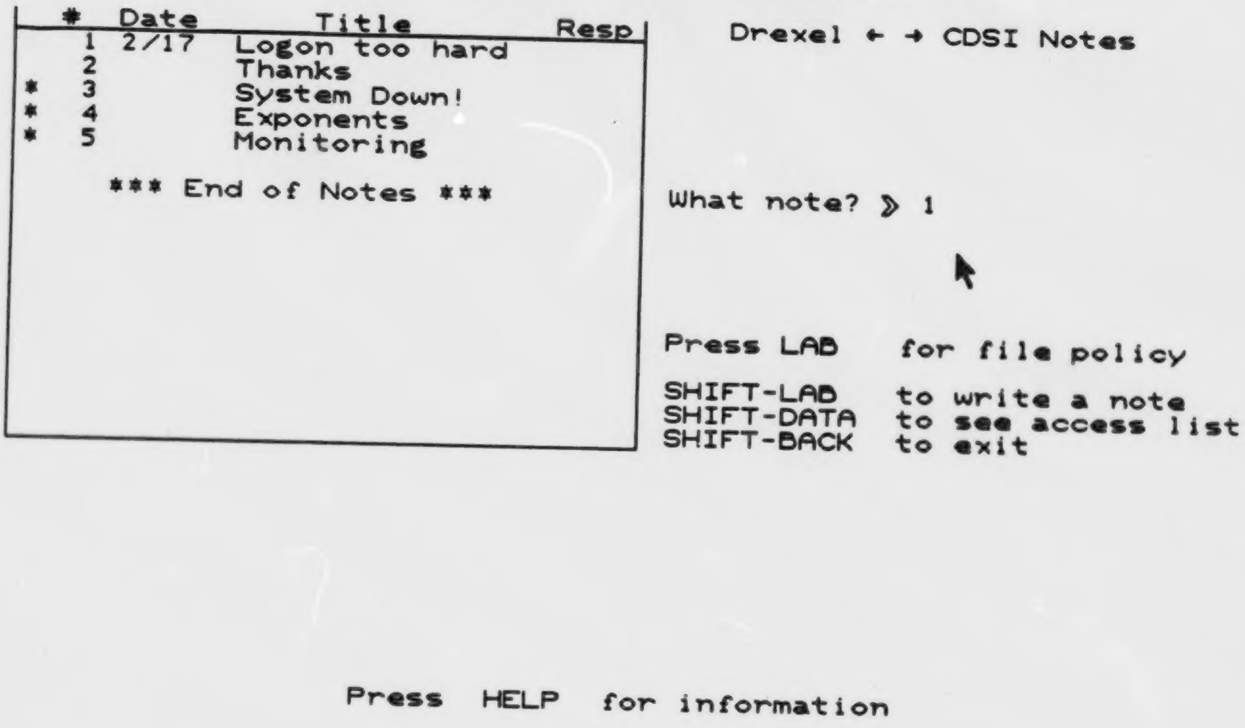
```
CYBIS will be down all day Sat. 2/20 & maybe AM of Sun. 2/21
notesfile =iportal= is now on this system if you're interested




              What lesson? ≫ philusers
```

Illustration 7: bulletin board screen



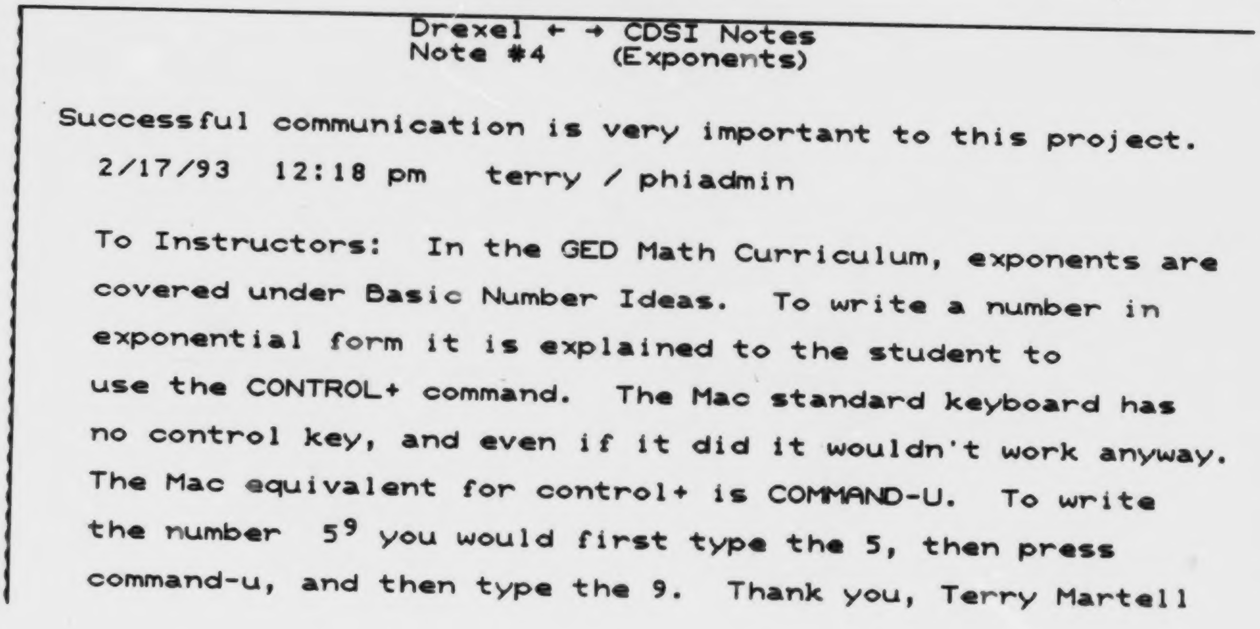
```
   #  Date       Title          Resp      Drexel ← → CDSI Notes
   1  2/17  Logon too hard
   2        Thanks
*  3        System Down!
*  4        Exponents
*  5        Monitoring

      *** End of Notes ***               What note? ≫



                                         Press LAB     for file policy

                                         SHIFT-LAB     to write a note
                                         SHIFT-DATA    to see access list
                                         SHIFT-BACK    to exit



                 Press  HELP  for information
```

Illustration 8: type 1 for first BB message, etc



```
  #  Date      Title            Resp     Drexel ← → CDSI Notes
   1 2/17  Logon too hard
   2       Thanks
*  3       System Down!
*  4       Exponents
*  5       Monitoring

     *** End of Notes ***               What note? » 1



                                        Press LAB    for file policy

                                        SHIFT-LAB    to write a note
                                        SHIFT-DATA   to see access list
                                        SHIFT-BACK   to exit




                  Press  HELP  for information
```

Illustration 9: a note



```
                 Drexel ← → CDSI Notes
                 Note #4     (Exponents)
```

Successful communication is very important to this project.

2/17/93 12:18 pm terry / phiadmin

To Instructors: In the GED Math Curriculum, exponents are covered under Basic Number Ideas. To write a number in exponential form it is explained to the student to use the CONTROL+ command. The Mac standard keyboard has no control key, and even if it did it wouldn't work anyway. The Mac equivalent for control+ is COMMAND-U. To write the number 5^9 you would first type the 5, then press command-u, and then type the 9. Thank you, Terry Martell

IMSATT Meeting

Thursday, February 18, 1993

CYBIS Commands and Files:

philuse: The philuse (*Phil*adelphia use) command will give you specific usage stats for each learner in your group.

philusers: This command is the preferred way of seeing the names of the currently running users. There are two other ways to see who is currently running on the system:

- The first is choosing *see who is on* from the Interactive Communications menu. Student users do not show on this list, only teachers and CDC users.
- The second is by typing in the group name and going through several menus to see who is logged on in that group. If a learner's name appears on this list it means that he/she is logged on, but not yet working on a lesson. Once the learner begins a lesson, his/her name disappears from these lists and it appears as if they aren't logged on.

Using the **philusers** command will show you the name of everyone who is logged-on the system regardless of their activity!

drexcdsi: Drexcdsi (*Drex*el and Control *D*ata *S*ystems *I*nformation) is a special notes file set up specifically for our use. It works similar to pnotes, but is a public bulletin board for those interested in current news, new developments, and technical problems and their solutions. You can address a specific person in these notes, but everyone can read them and benefit from the information. You can also read a note sent by someone else, respond to it, and other readers will have access to your response.

Other Information:

- It has come to Drexel's attention that a learner who has begun working on a lesson cannot be contacted by you or anyone else by way of term-talk or monitor mode, until he/she comes out of the lesson and back to the menu. We have contacted CDC to see if this can be changed.

- Learners can contact you, however, if they initiate a term-ask. If you receive a page from a student for a term-ask, choose *term-ask requests* from the Interactive Communications menu. Answering this page also gives you the ability to term-talk and monitor the asker.

Term-Talk/Term-Ask/Monitoring

Term-Talk --To talk to another student who is also logged-on.

- Press the **Command** key and then press **T**.
- At the arrow, type the word "**talk**" and press **NEXT** (Return).
- Type the **sign-on name** of the person you wish to talk to and press **NEXT**.
- Type the person's **group name** and press **NEXT**.
- You will see a message telling you that:
  - --the person is being paged
  - --the person is not signed on
  - --the person is not available

or --there is no such person or group.

If the person is not available, press Next to end of Term-Talk.

If The Person Answers Your Call:

- Two arrows will appear at the bottom of the screen. One is yours, the other is his/hers.
- Type one line of a message, pause a few minutes to allow your friend to read the message, and then press **LAB** (Command L) to continue the next line of your message (Each time you press LAB, your line disappears to you and your friend!)

To Answer a Term-Talk Page

If someone wants to talk to you and is paging you:

- Press the **Command** key and then press **T**.
- At the arrow, type the word "**talk**" and press **NEXT** (Command N).
- Two arrows will appear at the bottom of the screen. One is yours, the other is his/hers.
- Type one line of a message, pause a few minutes to allow your friend to read the message, and then press **LAB** (Command L) to continue the next line of your message (Each time you press LAB, your line disappears to you and your friend!)
- **To end a Term-Talk, type good-bye to your friend and then press Shift-Stop (Shift/Command/S).**

Term-Talk/Term-Ask/Monitoring

Term-Ask -- If you are working and run into trouble, you can do a Term-Ask and page an instructor who is logged-on for help.

- Press the **Command** key and then press **T**.
- At the arrow, type the word "**ask**" and press **NEXT** (Command N).
- You will see a message telling you that:

--Someone has been notified: an instructor is available to answer your question and has been notified you called. You can continue your lesson while you wait for your instructor to contact you (it usually takes a few minutes for your instructor to reply).

--Sorry, no one is available: an instructor is not currently available to answer your question. In some cases, you are given the option to write a note to your instructor.

When the Instructor Contacts You

- You will see a message like "terry/phiadmin/cdc also sees this display."
- An arrow appears in the lower left corner of your display and any message the instructor sends to you will appear here.

If You Want to Respond to the Instructor

- Press the **Command** key and press **T** (Command T).
- Another arrow will appear for you to talk.
- If your message requires more than one line of typing, give your instructor time to read what you have typed and then press **LAB** (Command L) to clear the line and continue typing.
- **The LAB key is the ONLY key that allows you to continue typing. If you use something else, for instance, NEXT or Return, your arrow will disappear!!**
- If you do this by accident, start from the beginning by pressing **Command T**.

Term-Talk/Term-Ask/Monitoring

For the Instructor to Monitor your Display

Your instructor can monitor your display to see what you are doing, however when your instructor first contacts you, you must:

•Press **Return** to exit from "talk" mode because you can't be monitored in that mode.

•Replot your screen so that the instructor can see what you are doing. To replot your screen, press the **DATA** key (Command D).

•After you have replotted, you can then resume "talk" mode if you wish. But, you must come out of "talk" mode if you want to change screens or move around the screen at all.

•To end term-ask (monitor) mode, make sure you type good-bye or thanks to the instructor and then press **Shift-Stop** (Shift/Command/S).

**See list of student sign-on names and their pnote addresses.

***See list of instructor sign-on names and their pnote addresses.

Looking at Learner Records

To look at your whole group records:

1. Log on under your "phiadmin" group.
2. When it asks, "What lesson? type "phi0000(groupnumber)" and press <Return> (today, lets look at our own: type "phi00009" and <R>)
3. Type 3 to choose "Statistics and Group Management Options" (no need for <R>)
4. Click on the "Data" button (or press command-d) (no need for <R>)
5. Press the Return key for Next
6. Type the letter "a" (do not press return)
7. When it gets to the next screen, press <R>

To leave this part, click on the back button 4 times.

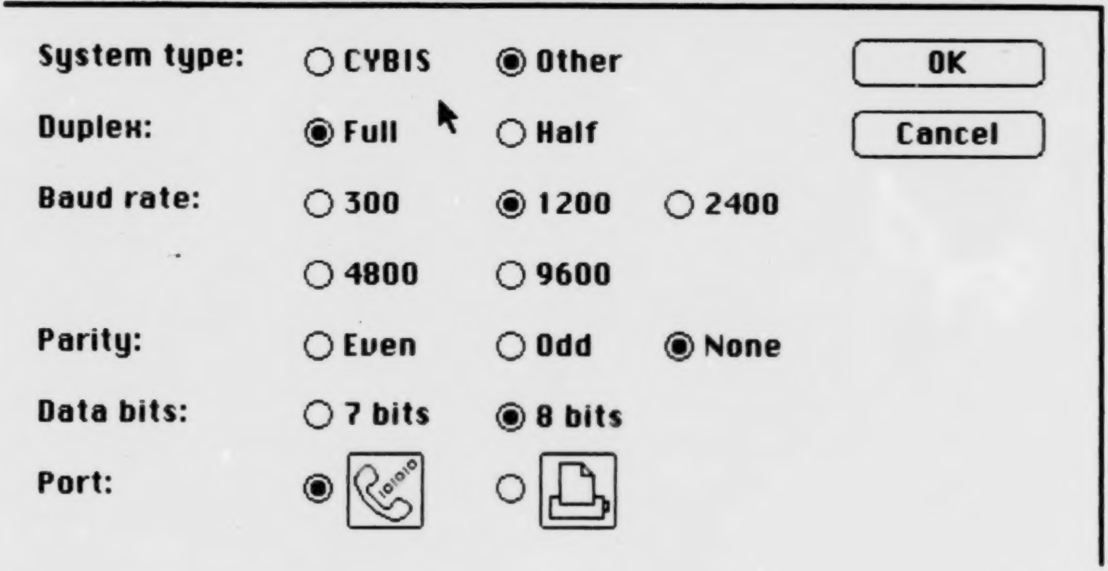
To look at individual records:

1. Follow steps 1-2, above.
2. Type "2" to choose Roster operations (or just press <R>)
3. Type "a" to choose "See or Change Someone's signon"
4. Follow directions: type the first few letters of the signon name of the person whose records you want to examine.

To leave this part, click on the back button 4 times.

How to log on using the Internet

Old Power Learning Project Signon: Compatibility



System type: ○ CYBIS ● Other

Duplex: ● Full ○ Half

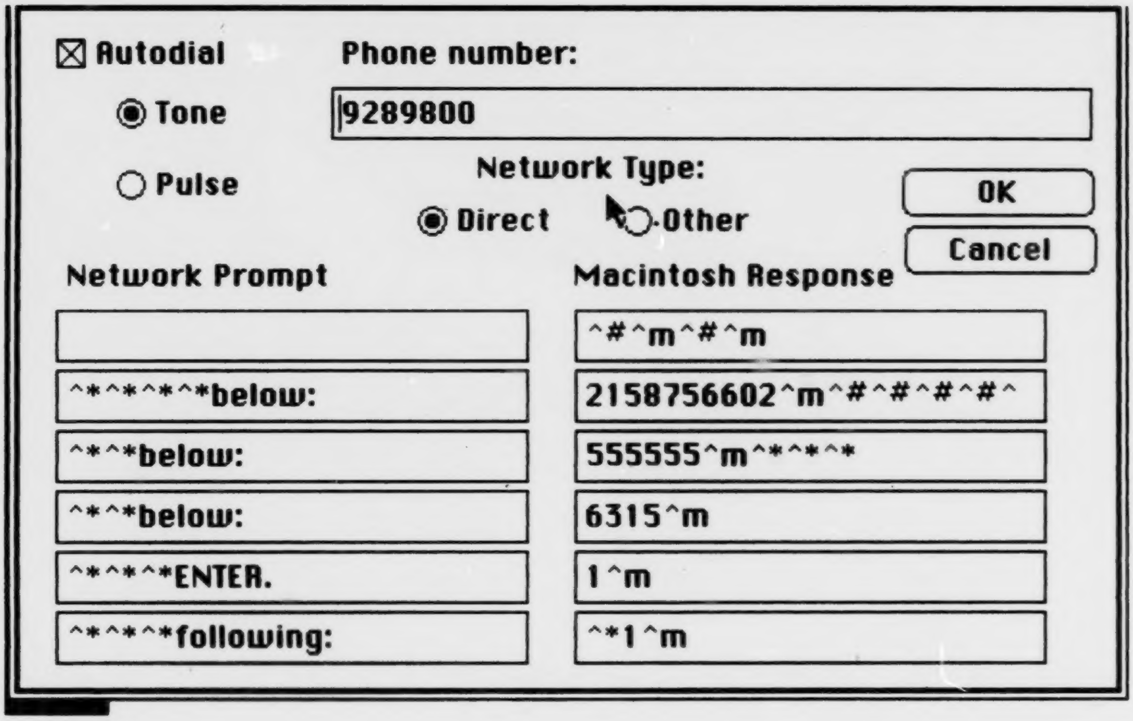
Baud rate: ○ 300 ● 1200 ○ 2400 ○ 4800 ○ 9600

Parity: ○ Even ○ Odd ● None

Data bits: ○ 7 bits ● 8 bits

Port: ● ☎ ○ 🖨

Old Power Learning Project Signon: Network



☒ Autodial

● Tone

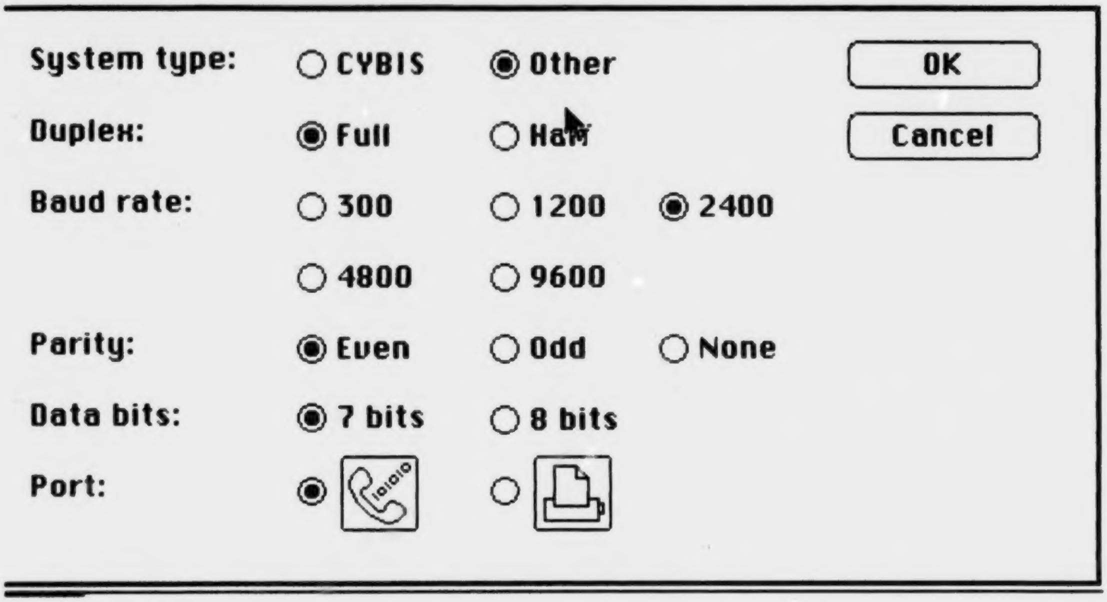
○ Pulse

Phone number: 9289800

Network Type: ● Direct ○ Other

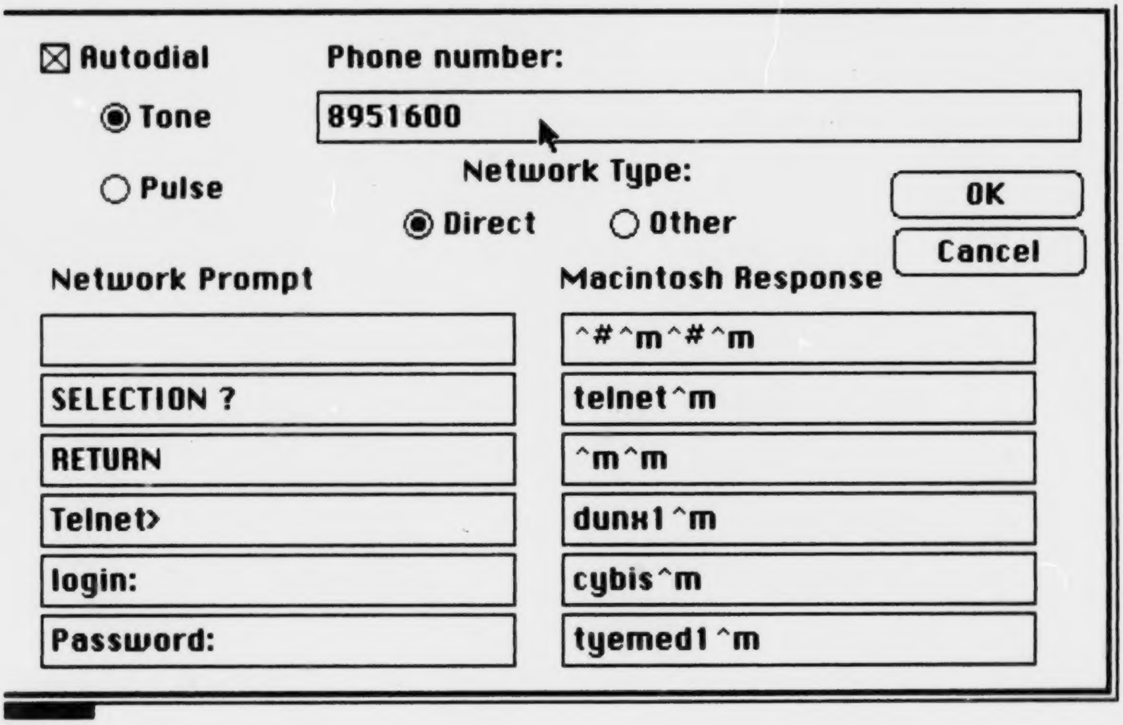
Network Prompt	Macintosh Response
	^#^m^#^m
^*^*^*^*below:	2158756602^m^#^#^#^#^
^*^*below:	555555^m^*^*^*
^*^*below:	6315^m
^*^*^*ENTER.	1^m
^*^*^*following:	^*1^m

NewOld Power Learning Project Signon: Compatibility



System type: ○ CYBIS ● Other
Duplex: ● Full ○ Half
Baud rate: ○ 300 ○ 1200 ● 2400 ○ 4800 ○ 9600
Parity: ● Even ○ Odd ○ None
Data bits: ● 7 bits ○ 8 bits
Port: ● ☎ ○ 🖨

NewPower Learning Project Signon: Network



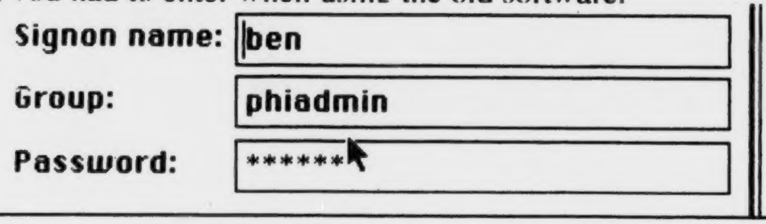
☒ Autodial
● Tone
○ Pulse

Phone number: 8951600

Network Type: ● Direct ○ Other

Network Prompt	Macintosh Response
	^#^m^#^m
SELECTION ?	telnet^m
RETURN	^m^m
Telnet>	dunx1^m
login:	cybis^m
Password:	tyemed1^m

If you or the learner are using the auto-signon procedure, you will need to go into the "Signon..." box and enter the information. This would be the same information you had to enter when using the old software.

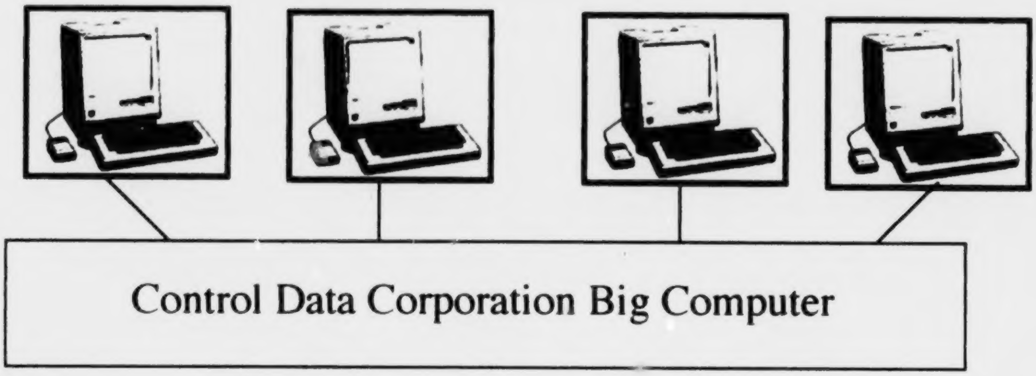


Signon name: ben

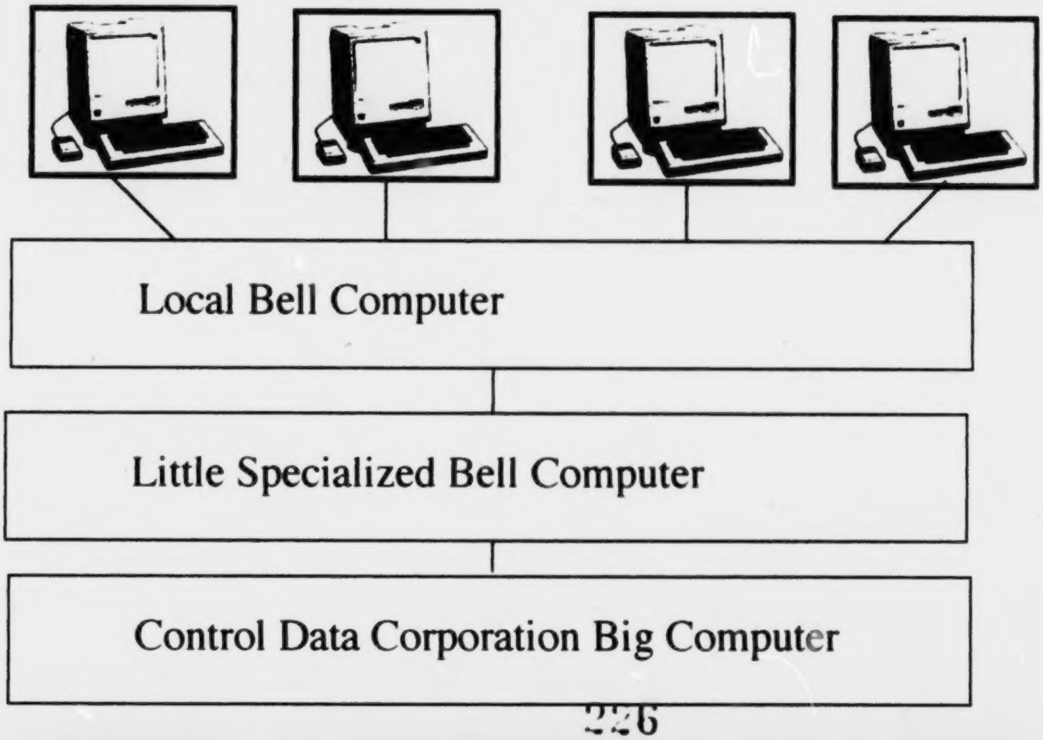
Group: phiadmin

Password: ******

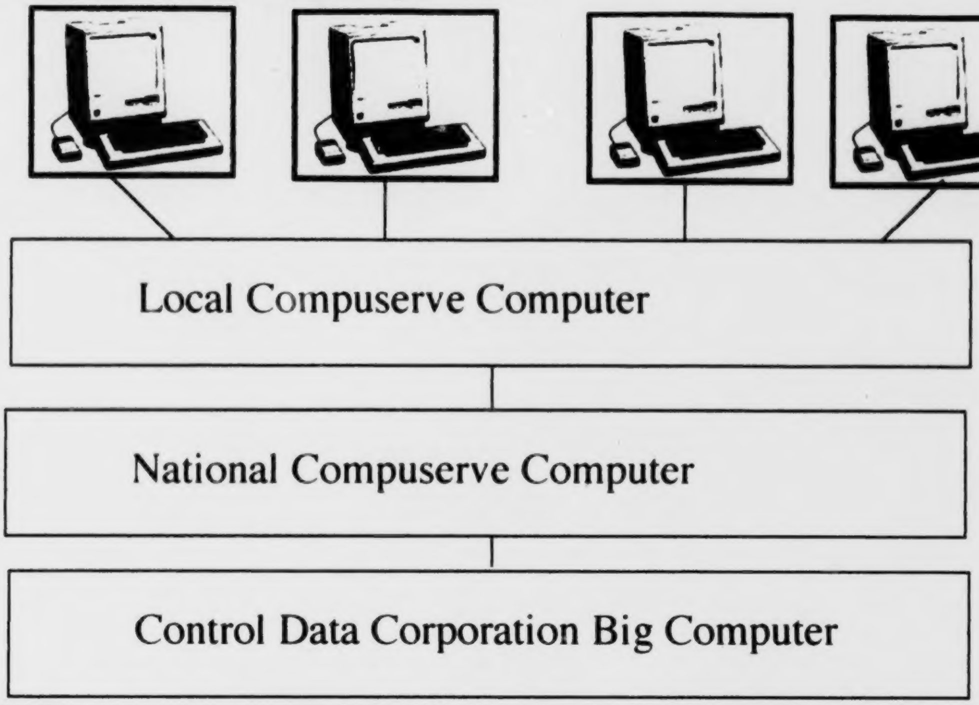
The 800 Number Method (no longer available)-- $12/hr


Control Data Corporation Big Computer

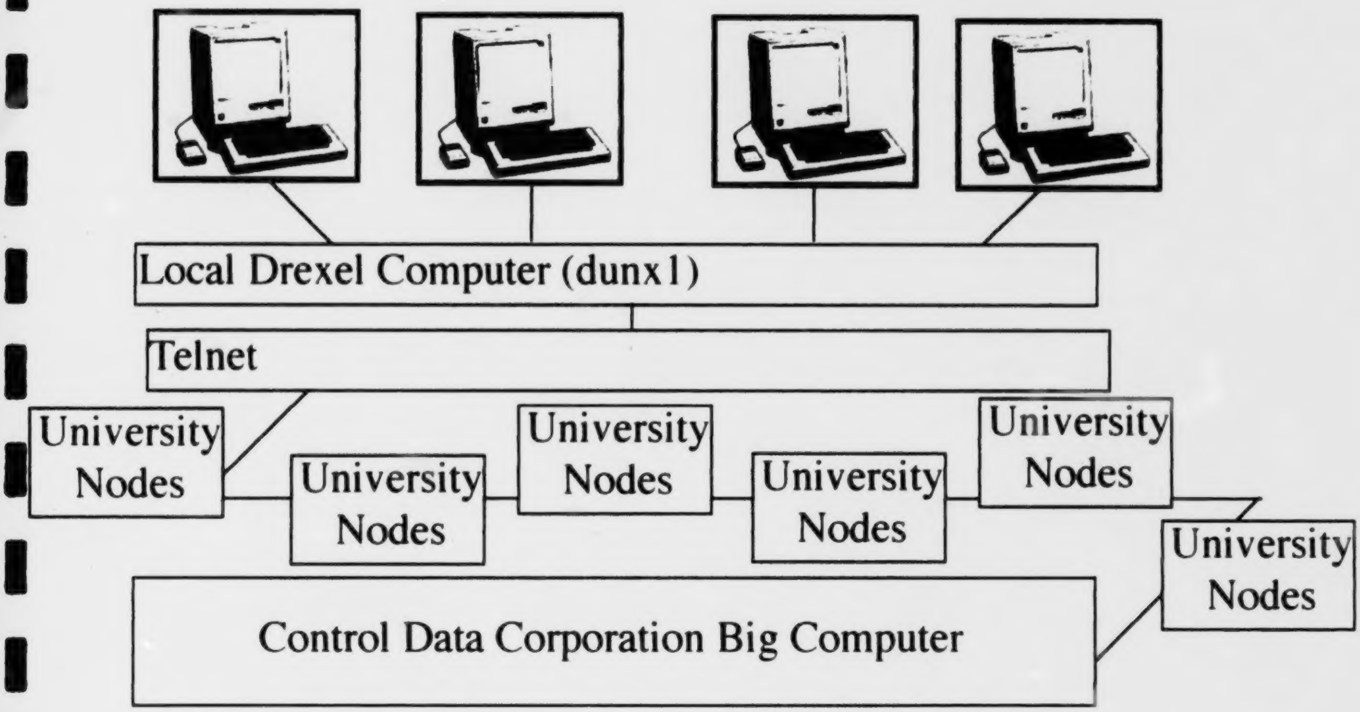
The Intelligate Method: donated, free but slow


Local Bell Computer
Little Specialized Bell Computer
Control Data Corporation Big Computer

The Compuserve Method:dial in to 563-1305, when it asks, "What System" type *homer* and press return, then manual log on. %5/hr.

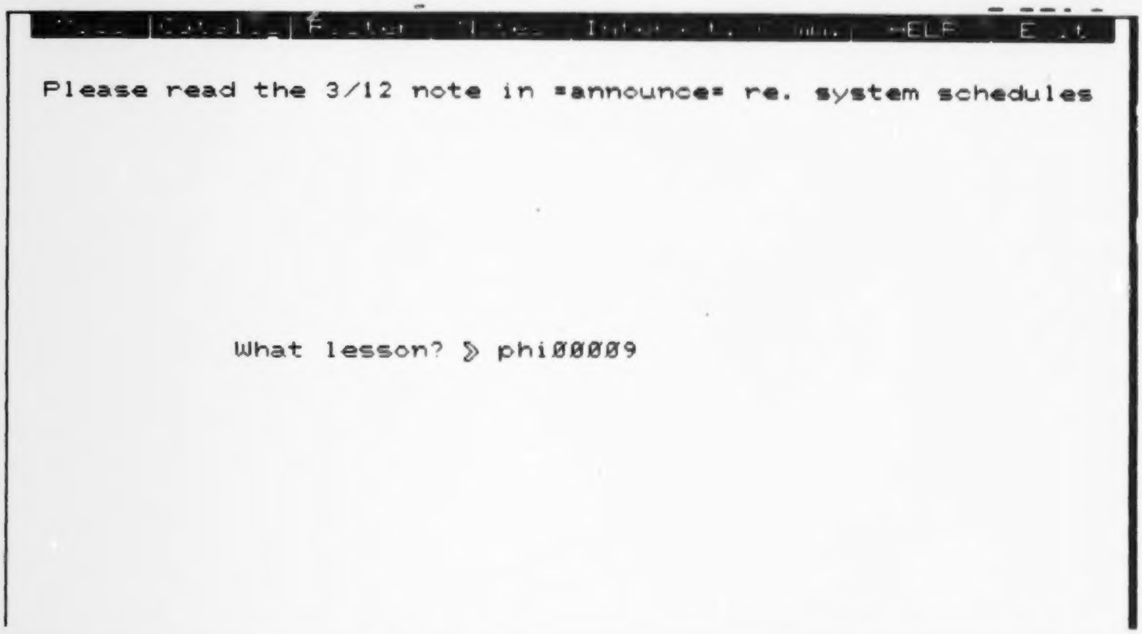

Local Compuserve Computer
National Compuserve Computer
Control Data Corporation Big Computer

The Internet Method:dials in to 895-1600, then automatically logs on. $5/month/user


Local Drexel Computer (dunx1)
Telnet
University Nodes
University Nodes
University Nodes
University Nodes
University Nodes
University Nodes
Control Data Corporation Big Computer

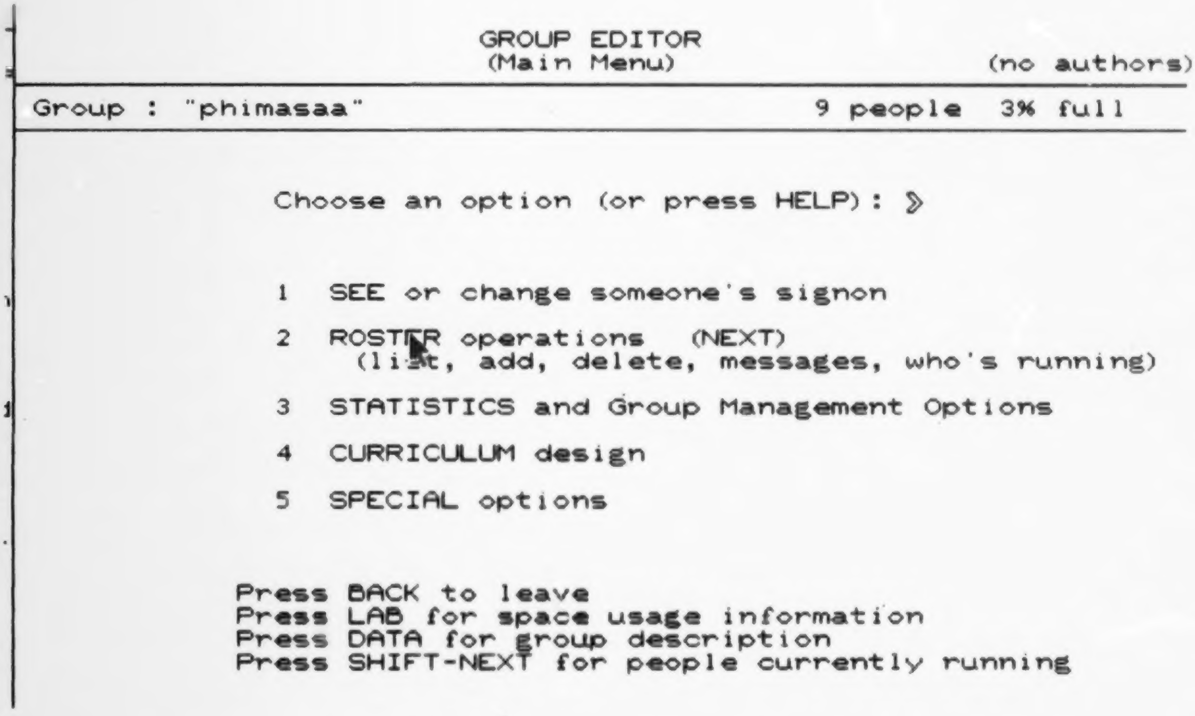
How To Exempt Students from a Lesson or Course

In order to exempt learners from courses if there is a technical problem (they pass the test but the program refuses o pass them to the next exercise), log on, go through =philuse= to find out the names of the lessons they are in, then,from the "What lesson? >" screen, type the name of the group. (Phimasaa is a math lesson)



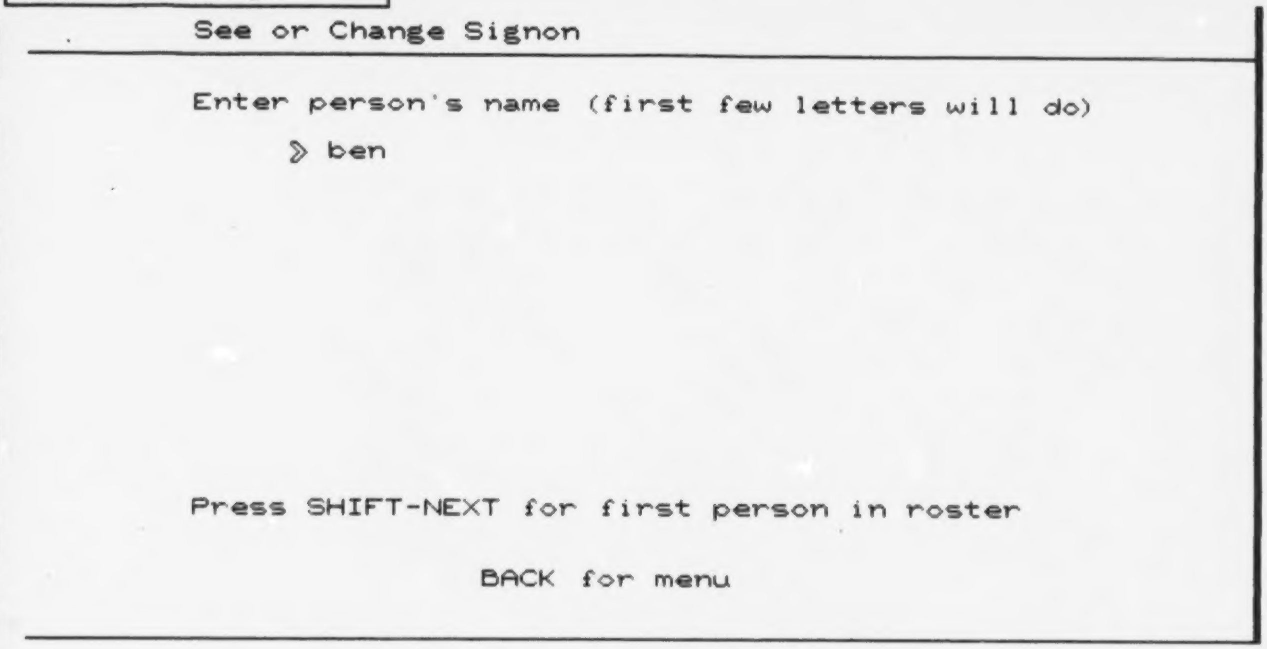
```
Please read the 3/12 note in =announce= re. system schedules




          What lesson? > phi00009
```

Now, Type 1.



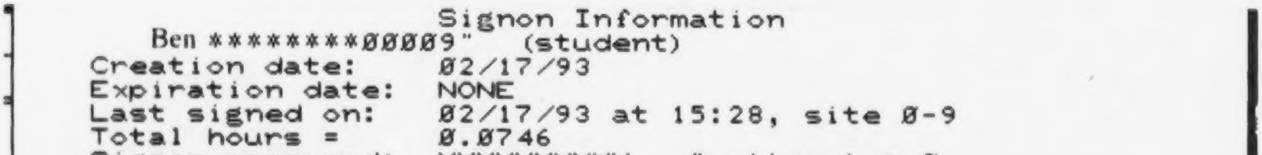
```
                    GROUP EDITOR
                     (Main Menu)                  (no authors)
 Group : "phimasaa"                       9 people  3% full

            Choose an option (or press HELP) : >

            1   SEE or change someone's signon

            2   ROSTER operations   (NEXT)
                  (list, add, delete, messages, who's running)

            3   STATISTICS and Group Management Options

            4   CURRICULUM design

            5   SPECIAL options


          Press BACK to leave
          Press LAB for space usage information
          Press DATA for group description
          Press SHIFT-NEXT for people currently running
```

Type the person's sign-on name



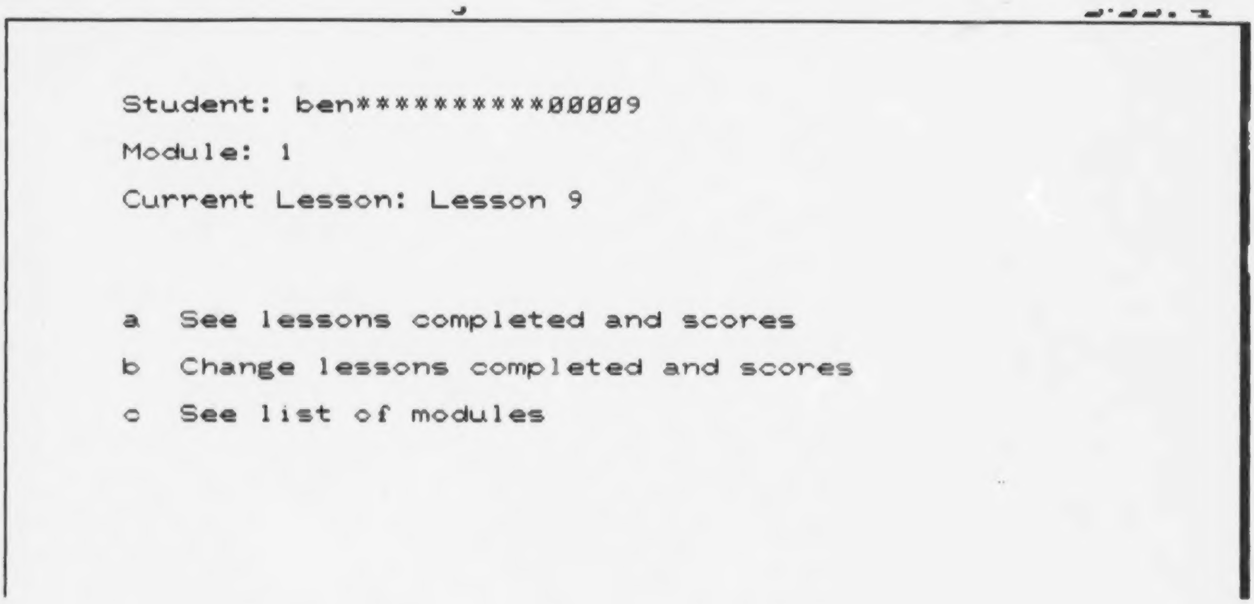
```
            See or Change Signon

            Enter person's name (first few letters will do)

                 > ben





            Press SHIFT-NEXT for first person in roster

                            BACK for menu
```

Type 4



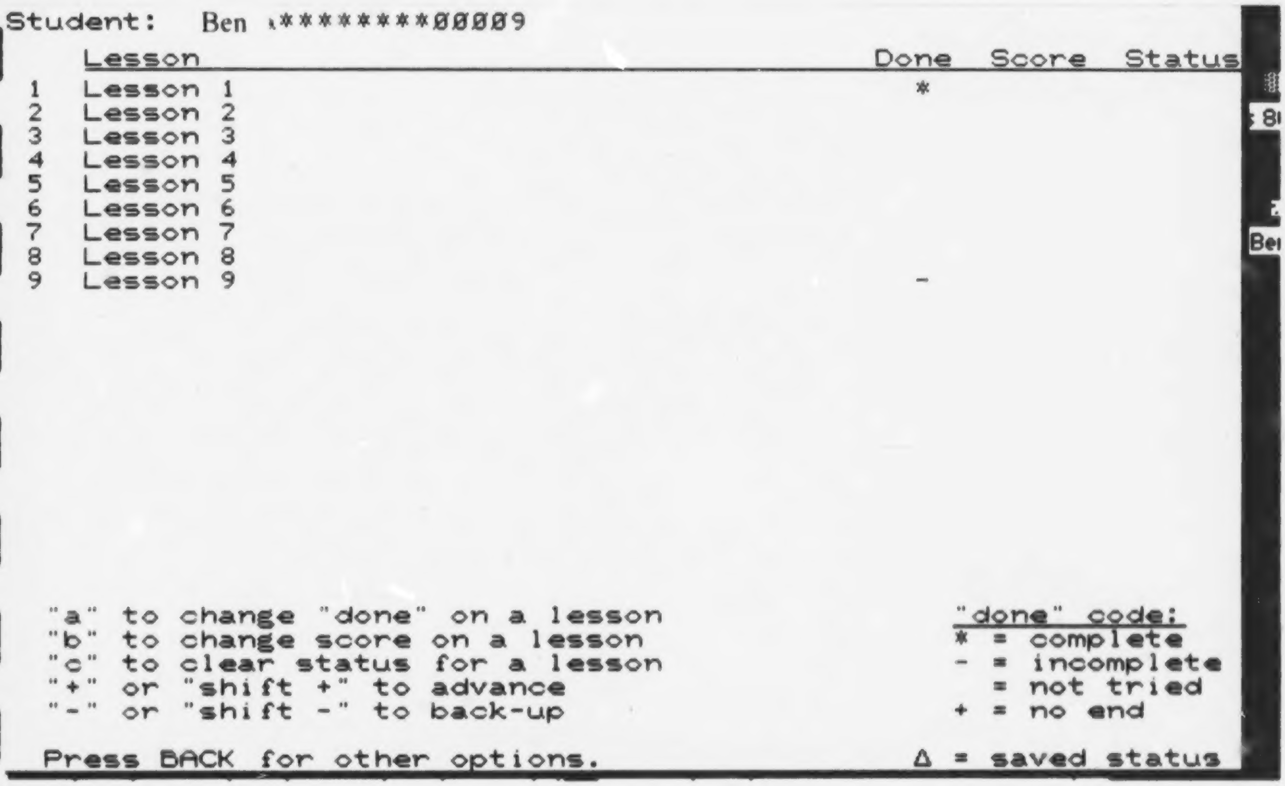
```
                   Signon Information
   Ben ********00009"   (student)
 Creation date:      02/17/93
 Expiration date:    NONE
 Last signed on:     02/17/93 at 15:28, site 0-9
 Total hours =       0.0746
 Signon password:    XXXXXXXXXX   # attempts: 0
 Last changed:       02/17/93

     Choose an option:

        1  change PASSWORD

        2  change spelling of NAME

        3  change EXPIRATION DATE

      [✓ 4]  curriculum STATUS (lessons completed, etc.)

        5  leave a MESSAGE

        6  ROUTING options

        7  SPECIAL options

     Press SHIFT-HELP for: delete, turn-off

     Press SHIFT-NEXT for next person in roster
           SHIFT-BACK for previous person
           HELP for help
```

TypeB



```
Student: ben***********00009

Module: 1

Current Lesson: Lesson 9


a   See lessons completed and scores

b   Change lessons completed and scores

c   See list of modules
```

Select the action you wish to take.



```
Student:   Ben *********00009
     Lesson                                          Done   Score   Status
 1   Lesson 1                                         *
 2   Lesson 2
 3   Lesson 3
 4   Lesson 4
 5   Lesson 5
 6   Lesson 6
 7   Lesson 7
 8   Lesson 8
 9   Lesson 9                                         -







  "a" to change "done" on a lesson                     "done" code:
  "b" to change score on a lesson                      * = complete
  "c" to clear status for a lesson                     - = incomplete
  "+" or "shift +" to advance                            = not tried
  "-" or "shift -" to back-up                          + = no end
 Press BACK for other options.                       Δ = saved status
```

BEST COPY AVAILABLE

Chronology of PLATO/CYBIS as of December 1993

Extensions of research on PLASMA display devices by Don Bitzer and Gene Slottow at the University of Illinois' Coordinated Sciences Laboratory (CSL) in the late 1950's and early 60's resulted in the definition of the system: Programmed Logic for Automatic Teaching Operations (PLATO). The first operation of the PLATO concept was with two terminals using ILLIAC I, a non commercial computer with a Williams vacuum tube memory. Control Data Corp. contributed a CDC 1604 as the first commercial and dedicated-to-PLATO computer. Twenty terminals were placed in operation, first under the Compiler for Automatic Teaching Operations (CATO), a FORTRAN based authoring language. Terminal records sufficed as student records until the addition of a large disk drive that held student records that were independent of the terminal. After that time, simultaneous and different courses could be executed. The TUTOR authoring system subsequently replaced CATO. PLATO moved to the CDC 6000 series computers with TUTOR, and runs on the CYBER 7X0, 8X0 and 9X0 series computers, continuing to use the TUTOR and Micro-TUTOR authoring language.

Funding for initial development was from Control Data Corporation, Advanced Research Projects Agency of the Department Of Defense (ARPA), National Science Foundation (NSF), US Office of Education (USOE), Office of Naval Research (ONR), University of Illinois (UofI), and The State of Illinois.

PLATO was first offered as a commercial product in the early 1970's by CDC. CDC and the UofI agreed to develop the system separately in the mid 1970's. UofI implemented a large scale project in teaching at the UofI and in the State of Illinois. The UofI later moved to a satellite-based communications system and renamed their system "NOVA NET," during the 1980's. It remains TUTOR based.

1972 The Air Force School of Health Care Sciences began a PLATO project, they moved to entire classes taught by PLATO, served by the UofI mainframe.

1976 Commercial PLATO became available from CDC at $1,130/month/terminal, including the terminal, and communications, with quantity discounts for 8, 16, 32... terminals.

GSA estimated that government spending for PLATO would exceed $10,000,000 a year by 1984 at the rate of use and development during 1981.

GSA's Bob Dove called a meeting of PLATO users which was hosted by the Air Training Command, Randolph AFB 2-3 March 81. Discussions began for government owned system(s).

1982 First plans laid for government owned PLATO services with government owned communications.

TRADOC Reg 10 5 identified DCSRM-IMD as responsible for chairing the Joint Committee on Computer-Based Instruction (JCCBI).

1983 AF SHCS taught 8,000 students per year, 3,000 course hours.

1983 JCCBI members wrote a Productivity Improvement Funding (PIF) project. The Office of the Secretary of Defense approved $14,300,000 in 1984 for FY84-

BEST COPY AVAILABLE

FY07 for on-line CBI (PLATO). The Army CBI system became known as the Joint Computer-Based Instructional System (JCBIS, pronounced "jay-SEE-biss"). JCBIS was government owned and government operated with contracted telecommunications from UNINET. The FAA provided their own communications network.

1984 JCBIS became operational.

1985 Department of the Army approved the Electronic Information Delivery System (EIDS) as the system for presenting off-line CBI. Army announced plans to field 40,000 EIDS for training in schools and in the field.

1986 The Army's Training and Doctrine Command (TRADOC) ordered the use of EIDS for Army Computer Based Training requirements and a consequent phase-out of PLATO for training by not authorizing further developments of courseware. Use of PLATO was to continue to support the TRADOC education program through the Army Continuing Education System (ACES). The JCCBI was transferred to the Deputy Chief of Staff for Training for operational control.

1986 The chargeback to users was $450. per terminal per month. Long haul communications for JCBIS changed to Telenet.

1988 Army Gen Max Thurmond endorsed the use of PLATO for civilian training instead of TDY and off-post training when possible.

1989 Army TRADOC did not prioritize EIDS high enough to ensure funding, ARSTAFF did not fund the plan for fielding EIDS. The number of EIDS was limited to a rumored 11,000 with 5,000 of those purchased by the National Guard). The EIDS were placed primarily in the training base; none were made available for the field. (No plans exist for recovery or reinstatement of the project.)

1989 Control Data Corporation sold the PLATO name, copies of the remedial and academic courseware, and the right to resell PLATO, to William Roach & Associates, which subsequently became The Roach Organization (TRO). They continue to offer PLATO as a LAN based system using Micro-Tutor.

1989 JCBIS communications contract changed to SMS Data Products Group (SMS).

1989 The moritorium on use of JCBIS for training removed by Army TRADOC's MG Downing. The training base could then use the JCBIS if they chose to do so.

1990 The largest Army users terminate their use of JCBIS for training as a result of the decision for the moritorium issued in 1986.

1991 The FY91 chargeback was $385 per month per terminal.

1991 End of the use of the PLATO name for the JCBIS, changed to CYBIS (CYBER-Based Instructional System). "PLATO" then refered only to the TRO system.

1991 JCCBI (CYBIS based) delivered from the JCBIS over 600,000 hours of instruction at a cost of $6.00 per student hour during FY91. About half the use was military, half was for Federal Aviation Agency (FAA) training.

1992 CYBIS updated by Control Data Systems, Inc. (New name, CDSI) and the University of Maryland cooperative project. New courseware standards for color, frame composition, and sequencing. The system became more "friendly."

1992 LAN based CYBIS developed under a cooperative project between TRADOC ACES and CDSI. It was demonstrated at Ft Eustis. The LAN approach preserves the advantages of the network: on-line communications for E-Mail at three different levels for trainers and educators, version control of the official master copy of courseware, central repository and transfer of student records for mobile student populations, transparent use of the network when courseware is not resident on the LAN, and monitoring of all operations for cost control and efficiency of personnel use for CBI delivery.

1992 Cost of instruction delivered by the JCCBI was $4.70 per student hour for FY92. Approximately 672,000 hours were delivered, a 13% increase over FY91, again, the use was about half-military, half-FAA.

1992 OSD PIF project to implement the LAN for JCCBI member users with 10 or more terminals was written, approved for funding, and subsequently disfunded.

1993 All non-FAA JCBIS computer services moved to Ft Leavenworth. Communications using FTS 2000 and locally funded LAN-based CYBIS systems for all non-FAA JCBIS became operational after a five month down-time transition period. Therefore, a delivery cost-per-student hour will not be computed for FY93.

1993 Restoration of service under the AT&T portion of FTS 2000 was very quick with few of the problems that had been experienced with all previous vendors of the contracted telecommunications services.

1993 End of the cooperative project between CDSI and the University of Maryland. Development work on CYBIS will continue at CDSI in Minnesota.

BEST COPY AVAILABLE

ATTACHMENT 4:
CONTRACTS

Provider Agencies
Software Support
Third Party Evaluator
On-Line Services

CAMPUS COMPUTER RENTALS, INC.

21-D OLYMPIA AVE. • WOBURN, MA 01801 • (617) 935-4900 • FAX: (617) 935-5134

Mon, Nov 2, 1992

Donna Cooper
Executive Director
Mayor's Commission on Literacy
Philadelphia, PA
215-875-6602
fax: 215-875-6586

Dear Donna,

Campus Computers will be able to provide your program with the 104 Macintosh computer systems that you need at the lowest possible price!

We can make them available to you on the following terms:

Availability Guaranteed: We are able to deliver the systems on December 1, 1992.

Equipment: 104 Macintosh Plus Systems with 800K external drives, 1 meg RAM, Keyboard, Mouse. Some units will have cosmetic defects or blemishes—this allows us to keep average cost down. All units will be very clean and thoroughly tested.

Warrantee: 1 Year from date of purchase on parts and labor.

Instant Repair: In order to keep your users on-line, we will provide your office with one "swap" MacPlus and 800K drive and three "swap" mice and keyboards. This will enable you to exchange a users malfunctioning unit instantly and ensure minimum down time. To the end user, repair of broken equipment will occur "instantly." "Swap" units will remain the property of Campus Computers.

24 Hour Service Guaranteed: Broken units shipped to Campus Computers will be repaired or replaced within one business day of our receipt. Repaired units will be returned to you via UPS ground (typically 2 business days shipping time). If we fail to turn a repair around in one business day, we will double the remaining warrantee on that unit for FREE.

Shipping: We will deliver the units to each of your 8 sights around Philadelphia, via padded van, for $10.00 per unit. If your program requires that the units be distributed in boxes, we can provide custom padded cartons (which you will find superior to Apple's original) for $15 per box/pad set.

Cost: $390 per unit *excluding* cartons and delivery.

Terms: Cash in Advance. In order to guarantee that the Macs are available by the date above we must receive payment in full by Thursday, November 6th. If you wish you may send the invoice via the Federal Express. Our corporate account number is 138414396.

Sincerely,

Eric Zimm

Eric Zimmerman

Campus Computer Rentals, Inc.
INVOICE

Invoice Number:
2961

From:
Campus Computer Rentals, Inc.
21-D Olympia Ave
Woburn, MA 01801
1-800-447-1542
fax: 617-935-5134

To:
Donna Cooper
Executive Director
Mayor's Commission on Literacy
1500 Walnut Street–18th Floor
Philadelphia, PA 19102
215-875-6602
fax: 215-735-6586

Customer Purchase Order Number:

Invoice Date:
November 2, 1992

Qty.	Product Description	Unit Price	Amount
104	Apple Macintosh Plus Computer	$350.00	$36,400.00
104	External Floppy Disk Drive	$40.00	$4,160.00
104	Shipping and Handling	$10.00	$1,040.00
104	Padded Multi-Use Cartons	$15.00	$1,560.00
		Total	**$43,160.00**

Please Make Checks Payable to Campus Computer Rentals, Inc.
Please Return Top Copy With Your Payment

DREXEL
UNIVERSITY

Office of Computing Services
Drexel University
Philadelphia, PA 19104
January 13, 1993

Ms. Donna Cooper
Executive Director
Mayor's Commission on Literacy in Philadelphia
Philadelphia, PA 19102

Dear Ms. Cooper:

This is to formalize the arrangement that the Mayor's Commission has with Drexel University to provide technical support for the Power Learning Project. Drexel's responsibilities include the following:

a. research and determine proper hardware to purchase and make a recommendation for type and vendor
b. attend all initial planning meetings
c. serve as a liaison with CDC and Imsatt to establish all connections and secure access to all resources promised us under the contract.
d. review and select 300 hours of software which can be recommended for use by teachers
e. train teachers in logging on
f. discuss with them how they will integrate this into their existing, total instructional program
g. conduct monthly meetings with all providers involved and review problems, successes and highlight both good lessons and exemplary integration strategies being used.
i. develop content evaluation instruments
j. administer instruments and collect data--summarize the data so that it can be given to the external evaluator for analysis and inclusion in the final report.
j. make site visits when necessary to solve problems or do training
k. provide on-line and phone support for users

Drexel will receive compensation for these responsibilities according to the budget attached. The responsibilities of the coordinator (Dr. Jan Biros) will not be charged to the budget, but $5000 will be reported as a contribution to the project. The terms of this agreement will be in effect until June 30, 1993. If the project continues or additional work is needed, a new arrangement will be agreed upon.

If this arrangement is agreeable to you please sign below. Thank you very much for your interest in Drexel University and we look forward to working with you on this exciting project.

Sincerely,

Jan Biros

Representatives for Drexel University

Dr. Janice Biros, Manager
Computing Resource Group

Jan Biros

Dr. j Minas, Director
Office of Computing Services

Dr. Eli Fromm, Vice Provost for Research

Eli Fromm

Representatives of the Mayor'sCommission

Ms. Donna Cooper, Executive Director

Budget for Drexel Technical Support
Power Learning Program
Salary

Review and Categorizing Software 4 weeks/ $1052/wk	$4,208
Plan and Conduct 10 monthly workshops for literacy centers 3 hours/$60/hr	$1,800
Fringe Benefits @ 24%	$1,442
Lab use for above workshop $100/workshop	$1,000
Coordination of program 56 hours @ $75/hour 20 hours for meetings 3 hours per month-12 months	$4,200
Printing/mailing/ duplicatic	$1,000
Evaluation	$3,000
Indirect @ 15%	$2,497
Total Program Cost	$19,147

IESD FAX TRANSMISSION

To: Jean Spriggs and Donna Cooper
Mayor's Commission on Literacy
FAX #: 215-735-6866

From: Jay Sivin-Kachala
Interactive Educational Systems Design, Inc.
FAX #: 516-226-9630

Date: January 22, 1993

Re: IESD Impact Analysis Evaluation Plan

No. of Pages: 5 (not including this cover sheet)

Comments:

Dear Jean and Donna:

Enclosed is the revised Impact Evaluation Plan. It is complete except for Page 4, Paragraph 2 --I have not received final confirmation as to the number of adult literacy programs providing control groups.

Please review the document and then call me today to finalize. I welcome any suggestions you might have for final revisions.

Sincerely yours,

Jay

IESD
INTERACTIVE EDUCATIONAL SYSTEMS DESIGN · INC
310 W 106 Street NY • NY 10025 212 • 865 • 3398

IESD IMPACT ANALYSIS EVALUATION PLAN:

THE MAYOR'S COMMISSION ON LITERACY DISTANCE LEARNING INITIATIVE

January 20, 1993

This document details KESD's plan for the Impact Analysis Evaluation of a pilot distance learning initiative that tests the effectiveness of home-based, interactive computer-assisted instruction (CAI) for adult learners. This project is being coordinated by the Philadelphia Mayor's Commission on Literacy on behalf of eight non-profit, community-based adult literacy education programs.

This proposal is divided into three parts:

- Goals of the Evaluation
- Evaluation Plan
- Estimate of Cost

Goals of the Evaluation

The goals of the evaluation will be:

- To determine whether home-based CAI, coupled with classroom learning, results in accelerated rates of achievement in reading, writing, and mathematics skills.
- To relate home-based CAI, coupled with classroom learning, to specific areas of achievement -- as perceived by teachers and students.
- To determine whether home-based CAI, coupled with classroom learning, results in higher student motivation and more positive attitudes toward learning.
- To determine whether home-based CAI, coupled with classroom learning, results in increased student self-esteem.

BEST COPY AVAILABLE

Evaluation Plan

In this section, we describe the evaluation plan in detail.

Preliminary Data Collection

In mid December 1992, we met with representatives of the Mayor's Commission on Literacy and the participating adult literacy education programs. The purposes of this meeting were:

- To learn as much as possible about the differences among the programs involved in the project.
- To present evaluation issues and options, and to gain the input of the participants.

As a follow-up to this meeting, representatives of the eight participating adult literacy education programs were asked to provide detailed information about their programs in written form. Their responses were analyzed by IESD.

Testing Instruments

IESD identified, analyzed, and selected testing instruments to meet the goals of the proposed evaluation.

Achievement. To assess achievement in reading and mathematics, the *Test of Adult Basic Education (TABE) Survey Form, Locator Test and Level E, M, or D* (CTB MacMillan McGraw-Hill) will be administered as a pre- and post-test.

To assess achievement in writing, essay tests will be administered as a pre- and post-test, using topics provided by the GED Testing Service. Each test will consist of two essays, which will be scored by an independent agency trained in the holistic scoring technique used by the GED Testing Service.

In addition to these formal assessment tools, IESD will construct survey instruments that will capture teacher and student perceptions of achievement over time.

- Teachers will periodically identify specific concepts and skills that were covered in class and indicate the percentage of the class achieving mastery. For broad skills for which gradual improvement over time is the goal (e.g., reading comprehension; writing) teachers will assign each student an improvement rating, using a 5-point Likert scale. Teachers will also explain their ratings, citing specific examples of student improvement.

- Students will periodically assign themselves improvement ratings for reading, writing, and mathematics, using a 3-point Likert scale, and will indicate what they think are the causes of their improvement (e.g., adult education classes, using the computer at home, other factors).[1] Students will also be asked to identify their personal learning goals, to assign themselves improvement ratings for these goals (using the same 3-point Likert scale), and to indicate what they think are the causes of their improvement.

Motivation and Positive Attitudes Toward Learning. Retention rate will serve as a measure of student motivation to build literacy skills.

In addition, a modified version of the *Survey of Study Habits and Attitudes, Form C* (The Psychological Corporation) will be administered as a pre- and post-test to assess changes in attitudes toward learning.

Self-esteem. To assess changes in student self-esteem, the *Culture-Free Self-Esteem Inventories for Children and Adults, Form AD* (Pro-Ed) will be administered as a pre- and post-test.

Additional Data Collection

The Commission staff monitor will provide IESD with monthly time-on-task and lesson mastery data for all work completed by students on the home computers.

Evaluation Design

As indicated above, the evaluation includes a pre-test (January 1993) and a post-test (June 1993) for:

- Achievement in reading, writing, and mathematics
- Attitudes toward learning

---

[1] Adapted from a method described in D. D'Amico-Samuels, *Perspectives on Assessment from the New York City Adult Literacy Initiative: A Critical Issues Paper* (New York: Literacy Assistance Center, November 1991).

- Self-esteem

Normative data exists for the *TABE*, the *Survey of Study Habits and Attitudes*, and the *Culture-Free Self-Esteem Inventories for Children and Adults* to allow for comparisons of the students receiving the experimental treatment with other students.

In addition, ?? of the eight adult literacy education programs will provide control groups. IESD will oversee the selection of control groups so that they match the experimental groups as closely as possible in terms of current achievement level. For the participating students attending these programs, the following research questions will be asked:

- Does the experimental treatment group demonstrate significantly greater gains in reading, writing, and mathematics skills than the control group?
- Is the retention rate of the experimental treatment group significantly higher than that of the control group?
- Does the experimental treatment group demonstrate significantly greater improvement in attitudes toward learning than the control group?
- Does the experimental treatment group demonstrate significantly greater improvement in self-esteem than the control group?

IESD will conduct statistical analyses to answer these research questions.

Finally, the data collected from the teacher and student survey instruments will be analyzed to identify specific areas of achievement related to the instructional objectives of each adult literacy education program and to the personal learning goals of students. As part of this analysis, we will compare the data collected from the teachers and students to monthly time-on-task and lesson mastery data for all work completed by students on the home computers. Process evaluation data provided by Drexel University will also be considered in this analysis. We will look for patterns of achievement related to the use of the home computers.

BEST COPY AVAILABLE

Ongoing Communication with Drexel University Process Evaluators

IESD will maintain ongoing contact with the Drexel evaluators to keep abreast of program changes and software or hardware problems that may impact on the outcome of this initiative.

Analysis Report

We will prepare a written analysis report presenting and explaining our findings. This will be submitted to the Commission in July 1993.

Debriefing the Commission Staff

After submitting our report, IESD analysts will be available to answer any questions the Commission staff might have. If desired, a formal debriefing session can be arranged.

Estimate of Cost

For consulting services as Impact Analysis Evaluator for a pilot distance learning initiative that tests the effectiveness of home-based, interactive computer-assisted instruction (CAI) for adult learners.	$15,000.00

The above estimate does not include the cost of any third-party testing instruments available for use on a fee basis.

It is assumed that the written evaluation report will focus on the presentation and explanation of IESD's analysis and findings. While it may refer to data provided by Drexel University's process evaluators, the IESD report will not summarize Drexel's findings.

The Power Learning Program

a Distance Learning Pilot for Adult Literacy Students in Philadelphia

Bell Atlantic has made a $100,000 donation to the Mayor's Commission on Literacy in Philadelphia to support a distance learning pilot project in Philadelphia. Drexel University's Office of Computing Services has been contracted with to provide training and technical assistance to all the participating agencies and providers. The purpose of the project will be to give people access to educational software in their homes over the phone lines and determine how they make use of it and how it affects the progress they make in the literacy program they are in. Bell Atlantic is interested in eventually marketing this type of software to its regular customers, but would like to test the market and the effectiveness of the program with a small pilot group. The Mayor's Commission on Literacy has also received an addition $100,000 grant from the National Institute on Literacy to evaluate and support the program.

Eight literacy providers in Philadelphia have been invited to participate and involve 12 of their students in the project. The eight literacy centers are the Lutheran Settlement House, Aspira, the Community Women's Educational Program, Temple University, the Center for Literacy, the Indochinese Cultural Center, the YMCA, and Drexel University. These centers will identify 12 students who are interested and highly motivate to participate. Each student will be given a Macintosh Plus computer and modem to use in his/her home for the duration of the project. The computer will ultimately be the property of the literacy providers. Students will log on to Plato based software residing on a mainframe in Minneapolis and will do so over the phone lines at the cost of a local phone call. These students, who are involved in literacy programs in a participating center, will access to this software to supplement their regular literacy instruction. This at home learning will help those with transportation or childcare problems to augment their studies easily right at home. In addition, we will be investigating how other members of the family use the computer materials and how the presence of this technology at home affects parent/child interaction, parent interest in children's school work and other such family literacy issues.

Drexel has been involved in hardware selection and acquisition and will be responsible for aiding literacy centers in making effective use of the technology and helping their students participate fully in the program. This will consist of providing monthly "training " programs for the teachers involved and will involve reviewing the software to make recommendations for use. Drexel will also provide phone support and site visits when necessary.

Distance learning is a concept which has been around for some time, but is only now becoming more practical. This project is significant as it is the only one of its kind in the country and is attempting to test the practicality of distance learning with a non-traditional, disadvantaged population.

Content Evaluation of Power Learning Project

Drexel has been asked to collect information regarding some of the subjective, affective aspects of the students' and teachers' experiences in the Power Learning Project. Drexel has designed a plan and instruments to collect this information and will do so and pass it on to the external evaluator for inclusion and analysis in the final reports regarding the project. The goals of this content related evaluation will be to determine:

a. how often/how long learners are using the on-line software
b. what difficulties the learners have using the software or hardware
c. how effective the tutor/teacher--learner relationship is in this type of project
d. what other family members are using the system and for how long usage form
e. what changes may have taken place in the household since the introduction to the computer--less TV, more parent/child interaction and discussion, increased interest in learning, homework etc.
f. how long teachers are spending supporting student work in the project
g. how effective teachers feel the software is in supplementing what they are doing in class
H [illegible]

BEST COPY AVAILABLE

Student Reporting

Learners will be asked to keep a journal which would be provided to them. They would be asked to write an entry into the journal as often as they would like with a minimum of once per week (if they wanted to write after each on-line session, they would be able to).

The journal pages would contain the following areas for student reporting.

Date________________

How long did you work on the computer? __________hrs.

What did you work on? (check which one) On-line _______

Word Processing _______

Did you work alone on your work Yes _____ No _____

Did you work with someone else Yes _____ No _____

Did you have trouble at all with your work? Yes _____ No _____

Did you have trouble getting the computer to work properly?

Yes _____ No _____

Did you have trouble getting the software to work properly?

Yes _____ No _____

Did you have trouble understanding the assignment on the computer?

Yes _____ No _____

Did you enjoy your work session today?

Yes _____ No _____

Why or why not? ____

____

____

Did you try to get help? Yes _____ No _____

What kind of help did you try? On-Line _____ Teacher _____

Were you successful? Yes _____ No _____

Comments:

____

____

____

Teacher Report

This report would be filled out by literacy instructors once per week minimum.

Date________________

How long did you work on the IMSATT Project this week? __________hrs.

Helping Students ________hours

Managing records ________hours

Reviewing and assigning lessons ________hours

Did you have trouble at all with your work? Yes ____ No ____

Did you have trouble getting the hardware to work properly?

Yes ____ No ____

Did you have trouble getting the software to work properly?

Yes ____ No ____

What did you like about the software lessons you worked with today?

____

____

What did you dislike about the software lessons you worked with today?

____

____

Do the lessons enhance your students' experiences? Yes ____ No ____

Why or why not?

____

____

Do your students use the computer more for on-line lessons or for off-line lessons (word processing)? On-Line ___ Off-Line ___

Comments:

____

____

____

Computer Competency Review

Each student will be reviewed upon the completion of the program to determine the ability to perform each of the computer skills listed below:

The student is able to :

1. open an application
2. open a file
3. close an application
4. save a file
5. distinguish between **Save** and **Save As**
6. copy text
7. move text
8. insert text
9. center text
10. set margins
11. change font attributes in existing text
12. print a document
13. format a disk
14. power down machine
15. perform a spelling check
16. change line spacing
17. close text after insertion
18. add/insert pages using pagebreak
19. copy files onto disk
20. erase files

AGREEMENT

This AGREEMENT entered into as of **FEBRUARY 1, 1993** between The Psychological Corporation, a subsidiary of Harcourt Brace Jovanovich, Inc., 555 Academic Court, San Antonio, Texas 78204-0952 (herein the "Publisher") and

Name: **CITY OF PHILADELPHIA**
MAYOR'S COMMISSION ON LITERACY
1500 Walnut Street, 18th Floor
Philadelphia, PA 19102
(herein the "Licensee"), WITNESSETH:

WHEREAS the Publisher is the owner of the SURVEY OF STUDY HABITS AND ATTITUDES (herein the "Work"); and

WHEREAS, the Licensee wishes to adapt and reproduce the Work for administration to adult learners in Licensee's research project (herein the "Licensed Uses"). It is understood and agreed that no commercial use may be made of the Work or the reproduction authorized herein.

NOW, THEREFORE, the Publisher and the Licensee agree that the Licensee may either produce, have produced, and/or distribute such reproductions of the Work specified above, solely for the Licensed Uses and subject to the following terms and conditions:

1. The Work shall be identified by title on any reproduction except as herein otherwise expressly exempted from this requirement.

2. The Licensed Uses specifically exclude the right to print, reprint, publish, copy, sell, give away or otherwise distribute, or to translate, arrange, adapt, or revise, or to exhibit, perform, display, represent, record, produce, or reproduce any portion of the Work, either separately or as part of any other larger publication, except as otherwise expressly provided herein.

3. (a) All rights in the Work not herein granted to the Licensee are expressly reserved by the Publisher.

   (b) The License granted herein shall be for a period commencing with the date first stated above and terminating FEBRUARY 1, 1994, whereupon all of the Licensed uses shall cease. Permission for any extension of the Agreement must be secured.

   (c) Published reports of the research study shall not include reproduction of actual test items or answers thereto unless separate permission therefore is granted in an addendum to this Agreement.

4. (a) Any reproduction of any portion of the Work shall bear the following copyright notice:

   Survey of Study Habits and Attitudes. Copyright © 1967, 1965, 1953 by The Psychological Corporation. Reproduced by permission. All rights reserved.

   (b) This notice shall appear on the title page (or reverse side of the title page), of each copy of any reproduction of the Work, or, if the Work is reproduced as part of a larger publication, at the foot of the first page on which the Work is reproduced. Minor rearrangements of the above format may be made in publications for purposes of editorial uniformity, but all the components must be included.

   (c) If this Agreement covers more than one Work, to be reproduced in one publication, the above model of notice of permission shall be used separately for each separate Work being reproduced, unless a combined form of notice is specifically approved by rider to this Agreement.

BEST COPY AVAILABLE

(d) In any published or unpublished reports of research conducted under this Agreement, a specific acknowledgment of the permission shall be made, including reference to the full title of the Work, the copyright notice, the author, and the publisher.

5. Licensee agrees to pay Publisher a license fee of $1.24 per reproduction/administration of the adapted Work which Licensee makes or has made, with a minimum amount due under this agreement of $100. Licensee shall provide such documentation deemed appropriate by the Publisher indicating the number of documents reproduced or administered within 30 days of Licensee's receipt of such an invoice. Publisher shall bill Licensee and Licensee shall pay for the licensing fees within 30 days of receipt of an invoice from Publisher.

6. The Licensee shall send the Publisher one copy of the Licensed Use reproduced from the Work under this Agreement. Upon reasonable written notice to the Licensee the Publisher will have the right, not more than once each year, to examine the books and records of the Licensee concerning the Licensed Uses of the Work, such examination to be during normal business hours and at the place where the Licensee ordinarily maintains its books and records.

7. The License granted herein is non-exclusive and non-transferable to any third party without written permission from the Publisher.

8. The representative of the Licensee whose signature appears in this Agreement represents and warrants that ~~he~~ she has full power to enter into this Agreement.

9. This Agreement shall only become effective if it is executed by the Licensee within thirty days of the effective date shown above.

10. This instrument constitutes the entire agreement between the parties and there are merged herein all prior and collateral understandings and agreements. No amendment or modification of this Agreement shall be valid unless in writing signed by both parties.

11. Regardless of the place of its physical execution or performance this Agreement shall be governed by and interpreted under the laws of the State of Texas, U.S.A.

CITY OF PHILADELPHIA
Mayor's Commission on Literacy
Licensee

Executive Director 4/13/93
Title Date

THE PSYCHOLOGICAL CORPORATION

Joanne M Lenke 4/21/93
Joanne M. Lenke, Ph.D. Date
Executive Vice President

CITY OF PHILADELPHIA

MAYOR'S COMMISSION ON LITERACY
1500 Walnut Street, 18th Floor
Philadelphia, Pa. 19102
875-6602
FAX No. 735-6586

EDWARD G. RENDELL
Mayor

DONNA COOPER
Executive Director

December 8, 1992

Ms. Colleen O'Connell
Director of Education
Community Women's Education
Project
2801 Frankford Avenue
Philadelphia, PA 19134-4096

Dear Colleen:

The Mayor's Commission on Literacy is pleased to be working in partnership with you to pilot the Power Learning Project in Philadelphia. Because this is a new nationally supported initiative, we all have a tremendous opportunity to impact the development of literacy policy and advance the means of literacy instruction by the outcomes of this project. I am sure that you are as hopeful and committed to a successful and informative experience as we are.

The Commission will be granting your agency $7,000 for your participation in this pilot project. An initial installment of $5,000 will be sent to you once you sign and return this letter of agreement. An additional $1,500 will be sent to you in April and the final $500 in August.

Over the last several months we have identified very clear terms and condition for your Agency's particpation in this project. They are:

- to recruit 12 learners who agree to participate in the pilot project for at least six months; these learners will have ~~reading~~ levels between the 5th and 8th grades; each learner must have a phone in his/her house in order to participate in the project CWEP is focussing on writing levels.
- to provide classroom based instruction for each learner for the full six months they are in the project; the instructor will prepare an individualized curriculum incorporated with the computer assisted instruction which will require the learner to access the system at least six hours a week for the entire pilot program; instructors are expected to include the use of E-mail and/or the bulletin board in their assignments

- to enter into a contract between your site and each learner to demonstrate your commitments to them and confirm their commitment to the pilot project; this signed contract will be part of the materials included for review by the Evaluators.

- to maintain an instructor's log which details the lessons, reactions, impact, problems and opportunities of the computer system; learners will also be asked to keep logs and forms which will be provided for them by the sites

- to participate in a project-wide pre and post testing process administered by the Commission; each site will also be expected to participate fully in the evaluation programs as designed by Drexel University and the external evaluator

- to inform learners who are receiving public assistance that they must sign-up for a special needs allowance to cover the $20.00 a month link-up charge; these checks will be restricted signature with the -Commission; those learners who are not on public assistance will have their $20.00 per month fee paid by the site; no charges for computer access may be passed onto the learner

- to ensure that your project coordinator attends each of the monthly development meetings; to assure that each learner will attend the orientation and the three and six month up-dates/celebrations

- to train learners to use the computers and access the system in December, 1992, and to bring all learners on-line in their homes no later than January 4, 1993; every effort will be made to have the learners begin the program prior to the holiday break

- to indemnify, defend and hold harmless the City from and against any and all losses, costs (including litigation costs and counsel fees), claims, suits, actions, damages, liability and expenses, including, but not limited to, those in connection with loss of life, bodily and personal injury damage to property occasioned wholly or in part by agency acts or omissions or the acts or omissions of agency agents, subconsultants, employees, or servants pursuant to this agreement.

Although not a condition of this grant, all participating agencies have nonetheless agreed to have a staff person available one night a week or on Sunday to be on-line for two hours to answer questions and interact with learners at a set time.

In addition to the $7,000, the Commission will give each site 12 computers to be used by the learners in their homes for the duration of the pilot project. A modem will accompany each computer; one additional modem will be given to each site to facilitate on-site log-on. The computers have a 12 month guarantee; however, any insurance costs or maintenance costs deemed to be outside the scope of the aforesaid guarantee shall be borne by your agency. All computers and modems become the property of the sites at the end of the project. Modems have a seven year warranty.

The Commission will bill your agency in July, 1993 for on-line costs of $20 per month for each learner not covered by public assistance.

Your signature on this letter confirms your agreement with all the aforementioned terms and conditions.

Director

Community Women's Education Project
Agency

12/16/92
Date

Executive Director

Mayor's Commission on Literacy

12/8/92
Date

APPENDIX A

Project Description (IMSATT)

The goal of this project is to provide literacy/basic skills Courseware at home for adult literacy students enrolled in eight of Philadelphia literacy programs. The project will enable learners to stay at home and to access instructional materials via their phone lines on their home computers. The project will examine the impact of such advanced technology in accelerating the pace of learning and boosting the motivation of the learner.

From among the eight Philadelphia literacy agencies a pool of one hundred learners, who are currently enrolled in these literacy programs and who are reading between the 5th and 7th grade levels, will be selected to participate in the Power Learning Project. Each learner will be lent a computer with a modem to use in their homes. Through the modem and phone lines they will access the IMSATT Courseware housed on IMSATT's CDC mainframe computers. Phone line access to the system is facilitated by Bell Atlantic Corporation whereby participants are guaranteed access for the cost of a local phone call. The learner will return the computer to their literacy agency at the end of their participation in the program so that another can take part in the program.

The Mayor's Commission on Literacy (MCOL) will serve as the coordinating agency working with Drexel University as the technical assistance arm of the project. MCOL and Drexel will select the types of computers purchased for the project and verify that the hardware meets the specifications of the IMSATT system. The IMSATT system will support both Macintosh and IBM based systems.

In addition to advising the Commission on the selection of the computers, Drexel University will give each of the eight agencies an opportunity to preview the system for at least two hours per site (16 hours of access to the system). Drexel will also thoroughly review the Courseware to develop a recommended pool of lessons to total no more than 300 hours. This preview and Courseware selection process is expected to take one month. It is anticipated that Drexel will need 150 hours of access to the system to review the Courseware.

Once this phase of the project is complete, Drexel will conduct a training for the staff of the eight agencies. This training will be hands-on and will require access to the IMSATT system for at least four hours. IMSATT is required to deliver the necessary emulation package to the Commission no later than four weeks after the execution of the contract. Drexel will load the emulation package on the computers before they are distributed to the sites.

Once review and training are completed this should take (approximately eight weeks) the computers will be given to the sites and they will be responsible for bringing their learners on-line with the system. Currently, it is understood that every learner will be able to access the system for a maximum of 45 hours per month. Instructor's time for examining learner records on the system will need to be deducted from each individual learners time. In the instance that the learner has reached the 45 hour ceiling and wishes to continue instruction during that month, the name of the learner will be submitted to the Commission who will request a ceiling waiver from IMSATT.

The entire project will last eight months from the execution of an agreement between the Commission and IMSATT. This eight month period will include two months of review and training and six months of learner access. IMSATT will be paid a total of $24,000. The first payment will be made to IMSATT upon execution of the contract. This payment will not exceed $10,000. The balance of the contract will be made in five equal payments over the next five months, although service will continue for an additional two months. Bell Atlantic will charge each learner $20.00 per month for usage of the system. MCOL and sites will make every effort to defray this cost to the selected one hundred learners.

IMSATT will insure that the system is completely operable for the duration of the contract. IMSATT will maintain appropriate staffing to insure that technical problems with the system can be resolved within 24 hours. The system will be down for routine maintenance only between 1:00 am and 5:00 am on Sundays, Wednesdays and Fridays. If other down-time is needed, the Commission will receive formal notification from IMSATT at least one week in advance of this occurrence. IMSATT guarantees that bulletin board capabilities are available in addition to the entire CYBUS Courseware.

APPENDIX B

IMSATT

Imsatt Corporation
Suite 301 George Mason Square 105 West Broad Street Falls Church Virginia 22046 703 533 7500 FAX 703 532 [illegible]

IMSATT CORPORATION
EDUCATION COURSEWARE

SECTION I:	**HOME BASED CURRICULUM**
SECTION II:	**BASIC SKILLS CURRICULUM**
SECTION III:	**SUMMARY OF COLLEGE CREDIT**
SECTION IV:	**GED CURRICULUM**
SECTION V:	**GAMES**

Section I: HOME BASED CURRICULUM

IMSATT CORPORATION
HOME BASED CURRICULUM

ACADEMIC CURRICULUM	HOURS OF INSTRUCTION
BASIC SKILLS	
Reading	187
Grammar	56
Math	119
English as Second Language	64
GED LEARNING SYSTEM	
Reading	42
Writing	46
Math	33
Science	42
Social Studies	40
Computer Awareness	5
ADVANCED SCIENCES	
Algebra	75
Geometry	45
Precalculus	120
Calculus I	125
Calculus II	120
Chemistry I	90
Chemistry II	95
Physics I	95
Physics II	26
Total	1425

TECHNICAL CURRICULUM	HOURS OF INSTRUCTION
Blueprint Reading	8
Data Communications	16
Electric Circuits	42
Electronics Curriculum	345
Energy Conservation Curriculum	
Opportunities in the Small Industrial Plant	10
Control Systems That Save Energy	10
Hydraulic Power Fundamentals	65
Ladder Logic	4
Mechanisms	111
Microprocessors: A Short Course	60
Pneumatic Power Fundamentals	42
Programmable Controller Fundamentals	11
Robotics	26
Telecommunications Curriculum	120
Variable Frequency Drive Fundamentals	16
Total	886

DATA PROCESSING	HOURS OF INSTRUCTION
Ada Overview	10
Ada Programming	
Ada Programming: Fundamentals	30
Ada Programming: Advanced Features	30
Ada Programming: Software Engineering	30
Business Systems Analyst Curriculum	
Introduction to Business Data Processing Concepts	25
Fundamentals of Systems Development	30
Data Base Management System Environment	12
Business Systems Analysis and Design	50
COBOL (Structured) Curriculum	300
Computer Literacy Curriculum	60
Data Processing Concepts Curriculum	
Introduction to Computers	10
Data Representation	11
Data Processing Concepts	38
Introduction to Programming in BASIC	20
BASIC Programming Techniques	25
FORTRAN, Structured	75
FORTRAN 77, Structured Programming	95
FORTRAN (CYBER) Features	6
Pascal	90
RPG Fundamentals	48
Total	995

PROFESSIONAL DEVELOPMENT	HOURS OF INSTRUCTION
Building Your Own Business Curriculum	39
Change and Choice	14
Customer Contact Skills	4
Effective Sales Calls	10
Helping Relationship	16
Keyboarding for Information Processing (Gregg)	8
Learning to Learn	8
Overcoming Self-Defeating Behavior	3
Reading Fundamentals	22
Selling: The Psychological Approach	14
Selling: The Strategic Approach Curriculum	21
Success	21
Understanding Others	5
Understanding Self	4
Value Selling	16
Word Processing	7
Wang Word Processing System: An Introduction	4
Total	216

BEST COPY AVAILABLE

MANAGEMENT CURRICULUM	HOURS OF INSTRUCTION
Affirmative Action Management	6
Better Business Letters	13
Communication Skills	3
Consulting Skills	8
Contract Bidding	2
Effective Supervision	2
How to Hire a Micro	14
International Travel Security	3
Managerial Planning, Organizing, and Control Curriculum	35
Managerial Success Curriculum	26
Problem Analysis and Decision-Making	24
Resource Management	16
Statistical Methods for Improving Performance (SMIP)	15
Supervisory Success	7
Time Management	5
Total	179

FINANCE CURRICULUM	HOURS OF INSTRUCTION
Accounts Receivable Collection Techniques	15
Capital Budgeting Curriculum	28
Finance for Management: A Graphic Approach	14
Financial Management Curriculum	45
Financing for Long-Term Growth Curriculum	28
Short-Term Financial Planning Curriculum	28
Understanding Financial Statements Curriculum	28
Total	186

Section II: BASIC SKILLS CURRICULUM

Basic Skills Curriculum

Basic Skills is an individualized, computer-based education program intended for persons whose achievement in reading, mathematics or language is substandard and lies within the accomplishment described by elementary school, grades 3 through 8. Separate Basic Skills curricula exist for reading, mathematics and language usage.

Basic Skills instructional materials are separated into:

Objectives:	The smallest unit of instruction. It represents a measurable competency within a given subject area.
Modules:	Deal with a basic concept which is composed of a group of specific objectives.
Lessons:	A meaningful grouping of modules which are packaged together to provide mixed practice of module concepts and testing to measure for retention.
Courses:	A major subset of a curriculum with a conceptual thread throughout. An example from the math curriculum is the "addition" course.

Basic Skills students have a wide range of abilities and backgrounds. Accordingly, each new student is first tested to determine his or her current level of competency within a given area of study. This diagnostic testing prevents the student from wasting time on familiar material. The student is instead placed at the most appropriate level and works through the CYBER-Based Instructional system to design a course that meets his or her particular needs. Thus, students are never the passive recipient of predetermined instruction, but take an active part in facilitating their education. The CYBER-Based Instructional system personalizes this working arrangement by using the student's name and providing graphic displays of the student's progress.

The material itself is presented in small, well-defined units that are less intimidating than large blocks of material. Specific learning objectives form the structure of each unit. These objectives progress from simple to complex, allowing the student to master the easier material and build up to the more difficult. Complete mastery of each objective must be achieved before the next objective is presented. Assigned material cannot be skipped over. The student's progress represents real learning–and can be measured.

When entering a curriculum for the first time, the student takes a diagnostic test which determines the proper module in which the student will begin. Within the various objectives, modules and lessons, additional testing is provided to determine that the student demonstrates adequate comprehension and understanding. Thus, through frequent, but not intimidating testing, the student realizes a form of individual guidance which approaches the tutorial setting.

Basic Reading Skills

Approximate Time: 187 Hours PLM File Name: 0bsreadc

Content:

Course: Making New Words 1

Approximate Time: 20 Hours
Introduces the basic concepts involved in the structure of words. In this course, the student examines simple word building; prefixes and suffixes in context. Third grade equivalency in reading skills is a prerequisite.

Course: Making New Words 2

Approximate Time: 19 Hours
Further develops the student's skill in creating new words using suffixes such as "er" and "or," prefixes, adjectives and adverb suffixes. Compound words are also presented.

Course: Understanding New Words 1

Approximate Time: 23 Hours
Introduces the basic concepts involved in vocabulary development as a basis for comprehension. In this course, the student examines comparatives, pronouns and prepositions in context. Third grade equivalency in reading skills is a prerequisite.

Course: Understanding New Words 2

Approximate Time: 17 Hours
Introduces homonyms, homophones, and homographs in context; synonyms; group and member; cause and effect; and idioms.

Course: Understanding What You Read 1

Approximate Time: 28 Hours
Introduces the basic concepts involved in literal comprehension of written material. In this course, the student examines methods of locating basic facts and understanding, remembering and interpreting what he/she reads. Fifth grade equivalency in reading skills is a prerequisite.

Course: Understanding What You Read 2

Approximate Time: 16 Hours
Develops concepts in understanding the written word, including remembering details, identifying the main idea, and understanding implied facts.

Course: Thinking About What You Read 1

Approximate Time: 21 Hours
Introduces the basic concepts involved in interpretation of written material. In this course, the student examines techniques for interpreting facts, descriptions, conclusions and the total theme. Fifth grade equivalency in reading skills is a prerequisite.

Course: Thinking About What You Read 2

Approximate Time: 15 Hours
Develops the student's skills in describing looks and feelings, determining causal relationships, and making predictions. Also introduces similes.

Course: Judging What You Read

Approximate Time: 21 Hours
Introduces the basic concepts involved in evaluation of written materials. In this course, the student examines techniques for determining the differences between fact and nonfact and the purpose of the author, evaluating what is read and separating facts from opinions. Fifth grade equivalency in reading skills is a prerequisite.

Objectives:

Upon completion of the Basic Reading Skills curriculum, students should be able to:

Construct new words from root words using suffixes, prefixes, simple endings and compound words.

Acquire an eighth grade equivalency vocabulary.

Comprehend the literal meaning of written passages.

Evaluate a written passage by separating fact from opinion.

Prerequisites:	None. It is suggested, however, that the student possess the grade level equivalency in reading as specified in the individual course descriptions above.

Basic Skills Curriculum

Basic Grammar Skills

Approximate Time: 56 Hours Router File Name: øgbrouter

Content:

Course: Language and Usage

Approximate Time: 22 Hours
Introduces the basic concepts of the parts of speech used in the English language. In this course, the student examines nouns, verbs, pronouns, adjectives, adverbs, prepositions, conjunctions and articles. Fifth grade equivalency in reading and language skills is a prerequisite.

Course: Building and Using Sentences

Approximate Time: 14 Hours
Introduces the basic concepts of the structure of valid sentences. In this course, the student examines sentences, phrases, clauses and subject-verb agreement. Fifth grade equivalency in reading and language skills is a prerequisite.

Course: Word Usage

Approximate Time: 9 Hours
Introduces the basic concepts of proper word usage in sentences. In this course, the student examines plurals, word confusion and possessives. Fifth grade equivalency in reading and language skills is a prerequisite.

Course: Capital Letters and Punctuation

Approximate Time: 7 Hours
Introduces the basic concepts of capitalization and punctuation. In this course, the student also examines more complicated punctuation, including semicolons, colons and quotation marks. Fifth grade equivalency in reading and language skills is a prerequisite.

Course: Writing Letters

Approximate Time: 4 Hours
Introduces the basic concepts of writing conventions. In this course, the student examines techniques for writing personal and business letters and completing applications. Fifth grade equivalency in reading and language skills is a prerequisite.

Basic Skills Curriculum

Course: Reading

CYBER Network Version

	Text Components		**Price**
76770346	Basic Skills Curriculum, Administration Guide		20.00
97639003	Reading Course Kit:		75.00
	76361706 - Making New Words 1 & 2	18.00	
	76361707 - Understanding New Words, 1 & 2	18.00	
	76361708 - Understanding What You Read, 1 & 2	18.00	
	76361709 - Thinking About What You Read, 1 & 2	15.00	
	76361710 - Judging What You Read	11.00	

IBM PC Version (5 1/4" disks)

97613860	Basic Skills Reading (contains all disks and manuals)	695.00

Curriculum: Basic Skills

Course: Grammar

CYBER Network Version

	Text Components		Price
76770346	Basic Skills Curriculum, Administration Guide		20.00
97639002	Grammar Course Kit:		25.00
	76360812 - Language and Usage	10.00	
	76360813 - Building and Using Sentences	10.00	
	76360814 - Word Usage, Capital Letters	10.00	

Objectives:

Upon completion of the Basic Language Skills curriculum, students should be able to:

Understand the parts of speech and how they are used in sentences.

Construct sentences, phrases and clauses.

Use plurals, negatives, homonyms and possessives in sentences.

Use capital letters and punctuation correctly in sentences.

Understand how to write personal and business letters and complete applications and forms.

Prerequisites: None. It is suggested, however, that the student possess the grade level equivalency in reading and language skills as indicated in the individual course descriptions above.

Basic Skills Curriculum

Basic Math Skills

Approximate Time: 119 Hours PLM File Name: øbsmath2

Content:

Course: Basic Number Ideas

Approximate Time: 9 Hours
Introduces the basic concepts involved in sets, numbers and numeration systems. In this course, the student examines the concept and terminology of set theory, the basic concept of numbers and the basics of numeration systems. Third grade reading ability is a prerequisite.

Course: Addition 1

Approximate Time: 6 Hours
Introduces the basic concepts involved in addition of whole numbers. In this course, the student examines the basic concept of addition, basic addition facts, the properties of addition and the addition algorithm. Third grade reading ability and knowledge of basic number facts are prerequisites.

Course: Addition 2

Approximate Time: 7 Hours
Introduces more advanced work in addition of whole numbers, including addition of multi-digit numbers and regrouping.

Course: Subtraction

Approximate Time: 8 Hours
Introduces the basic concepts involved in the subtraction of whole numbers. In this course, the student examines the basic concept of subtraction, basic subtraction facts and the subtraction algorithm. Third grade reading ability and knowledge of basic number facts are prerequisites.

Course: Multiplication 1

Approximate Time: 7 Hours
Introduces the basic concepts involved in multiplication of whole numbers. In this course, the student examines the basic concept of multiplication, basic multiplication facts, the properties of multiplication and the multiplication algorithm.

Course: Multiplication 2

Approximate Time: 11 Hours
Develops the use of the multiplication algorithm in instances that require no regrouping and in instances where regrouping is required.

Course: Division 1

Approximate Time: 10 Hours
Introduces the basic concepts involved in division of whole numbers. In this course, the student examines the basic concept of division, basic division facts and the division algorithm.

Course: Division 2

Approximate Time: 8 Hours
Develops skills in simple division with regrouping and skills in higher order division with and without regrouping.

Course: Fractions 1

Approximate Time: 16 Hours
Introduces the basic concepts involved in arithmetic operations with fractions. In this course, the student examines the basic terminology and concept of fractions, and addition and subtraction of fractions.

Course: Fractions 2

Approximate Time: 8 Hours
Introduces the multiplication and division of fractions, including operations involving mixed numbers.

Course: Decimals

Approximate Time: 8 Hours
Introduces the basic concepts of decimals, including renaming to fractional numbers. This course introduces addition, subtraction, division, and multiplication of decimal numbers.

Course: Ratio, Proportion and Percent

Approximate Time: 7 Hours
Introduces the basic concepts involved in ratio, proportion and percent. In this course, the student examines the basic concepts of ratio, proportion and percent as well as analytic strategies for problem solving.

Course: Geometry and Measurement

Approximate Time: 12 Hours
Introduces the basic concepts of geometric shapes and fundamentals of measurement. In this course, the student examines fundamental geometric concepts, line measurement, area measurement, volume/capacity measurement and mass (weight) measurement.

Objectives:

Upon completion of the Basic Mathematics Skills course, students should be able to:

Understand the concepts of the four basic arithmetic operations (addition, subtraction, multiplication, division).

Acquire the initial facts of the basic arithmetic operations and expand those into general arithmetic algorithms.

Understand the concepts and terminology involved in fractions and decimals.

Apply the four basic arithmetic operations to fractions and decimals.

Understand the basic concepts involved with ratio, proportion, percent, geometry and measurement and use these newly acquired skills in real-life applications.

Prerequisites: None. It is suggested, however, that the student possess the grade level equivalency in reading as specified in the individual course descriptions above.

Curriculum: Basic Skills

Course: Mathematics

CYBER Network Version

	Text Components		**Price**
76770346	Basic Skills Curriculum, Administration Guide		20.00
97639001	Math Course Kit:		35.00
	76770352 - Basic Number Ideas, Addition 1, Addition 2, Subtraction	10.00	
	76361712 - Multiplication 1, Multiplication 2, Division 1, Division 2	10.00	
	76770353 - Fractions 1, Fractions 2, Decimals	10.00	
	76361714 - Ratio, Proportion and Percent, Geometry and Measurement	10.00	

IBM PC Version (5 1/4" disks)

76369642	Basic Skills Math (does not include text components)		795.00
	Text Components		
76770346	Basic Skills Curriculum, Administration Guide		20.00
97639001	Math Course Kit:		35.00
	76770352 - Basic Number Ideas, Addition 1, Addition 2, Subtraction,	10.00	
	76361712 - Multiplication 1, Multiplication 2, Division 1, Division 2	10.00	
	76770353 - Fractions 1, Fractions 2, Decimals	10.00	
	76361714 - Ratio, Proportion and Percent, Geometry and Measurement	10.00	

Section III: SUMMARY OF COLLEGE CREDITS

CYBIS CREDIT HOUR SUMMARY

COURSE NAME	TOTAL HOURS	FILE NAME	VALID. CEU	ACE CREDIT
ACADEMIC				
Algebra	75	0bac	7.5	2 sem. hrs.
Basic Reading Skills	187	0bsreadc		
Making New Words 1	20			
Making New Words 2	19			
Underst. New Words 1	23			
Underst. New Words 2	17			
Underst. What You Read 1	28			
Thinking About What You Read 1	21			
Thinking About What You Read 2	15			
Judging What You Read	21			
Basic Grammar Skills	56	0gbrouter		
Language and Usage	22			
Building and Using Sentences	14			
Word Usage	9			
Cap. Letters and Punctuation	7			
Writing Letters	4			
Basic Math Skills	119	0bsmath2		
Basic Number Ideas	9			
Addition 1	6			
Addition 2	7			
Subtraction	8			
Multiplication 1	7			
Multiplication 2	11			
Division 1	10			
Division 2	8			
Fractions 1	16			
Fractions 2	8			
Decimals	8			
Ratio, Proportion and Percent	7			
Geometry and Measurement	12			
Calculus 1	125	0calcplm	12.5	4 sem. hrs.
Calculus 2	120	0calc2plm	12	4 sem. hrs.
Chemistry 1	90	0chemtla	9	3 sem. hrs.
Chemistry 2	95	0ch2curr	9.5	3 sem. hrs.
Intro. to Computer-Based Educ.	8	0cbee	8	
CREATE Curriculum	250	0createcmi	25	8 sem. hrs.
Fundamentals		0cone		
Design		0ctwo		
Design/Development Interface		0cthree		
Development		0cfour		

CAI Design and Development		0cfive	
CYBER Author Language - Part I		0csix	
CYBER Author Language - Part II		0cseven	
Computer-Managed Instruction		0ceight	
Management		0cnine	
English as Second Language	7	0etcsif	.7
English as Second Lang. - Spanish	64	0eslif	
GED - Math	33		
Basic Number Ideas			
Math Sentences, Part 1			
Math Sentences, Part 2			
Geometry			
Measurement			
Special Topics			
GED - Reading	42		
Practical Reading			
Reading Skills and Strategies			
Intrepreting Literature			
Poetry			
Drama			
Commentary on Lit. and Arts			
GED - Writing	46		
Mechanics			
Grammar			
Diction and Style			
Sentence Structure			
Logic and Organization			
Essay Writing			
GED - Science	42		
Chemistry			
Physics			
Biology			
Earth Science			
Biology			
GED - Social Studies	40		
Geography			
Economics			
Behavioral Science			
Political Science			
History			
GED - Computer Awareness	5		
Computers for Anyone			
Computers and Employment			
Social Values and Computers			
Personal Computer Uses			
Computers and the Future			
Geometry	45	0hsgeo	4.5
Magnetism	8	0magnets	.8

Metric Number Conversion	1	2jmhmetrc		
Physics 1	95	0zphyscurr	9	4 sem. hrs.
Physics 2	26	0zph2curr	9	
Precalculus	120	0precalc	12	4 sem. hrs.
Statics Series	26	0statific		

TECHNICAL

Blueprint Reading	8	0bluif	8	
Data Communications	16	0perdata	1.6	2 sem. hrs.
Electric Circuits	42	0eeif		
Electronics Curriculum Basic Semiconductor Digital	345	0ribasel	34.5	5 sem. hrs.
ECC - Energy Conserv. Opportunities	10	0mitc		
ECC - Control Systems That Save Energy	10			
Hydraulic Power fundamentals	65	0hpfplmc	6.5	3 sem. hrs.
Ladder Logic	4	0gouldcur	.4	
Mechanisms	111	0fmeccurr	11.1	1 sem. hr.
Microprocessors: A Short Course	60	0micropro	6	3 sem. hrs.
Pneumatic Power Fundamentals	42	0ppfcurr	4.2	2/3 sem. hrs.
Programmable Controller Fundamentals	11	0pcfcurr	1.1	
Robotics	26	0rbtcurr	2.6	1 sem. hr.
Telecommunications Curriculum	120			
Intro to Telecommunications	16			
Math Fundamentals	32			
Electrical Fundamentals 1	16			
Electrical Fundamentals 2	16			
Intro to Computers	8			
Computer Math and Logical Functions	16			
Computer Hardware Fundamentals	16			
Variable Frequency Drive Fundamentals	16	0caccurr	1.6	

DATA PROCESSING

Ada Overview	10	0adaover	1	1 sem. hr.
Ada Programming: Fundamentals	30	0ada1	3	1 sem. hr.

Ada Programming: Advanced Features	30	0ada2	3	3 sem. hrs.
Ada Programming: Software Engineering	30	0ada3	3	3 sem. hrs.
BSAC - Intro to Bus. Data Proc. Concepts	25	0syan	2.5	3 sem. hrs.
BSAC - Fundamentals of Systems Devel.	30	0syan	3	3 sem. hrs.
BSAC - Data Base Mgmt. System Env.	12	0syan	1.2	3 sem. hrs.
BSAC - Bus. Sys. Analysis and Design	50	0syan	5	3 sem. hrs.
COBOL (Structured) Curriculum	300	0cblc	30	5 sem. hrs.
Computer Literacy Curriculum	60		5	3 sem. hrs.
Computer Literacy	48	0comlitif		
Computer Literacy Training	12	clintcur		
DPCC - Intro to Computers	10	0icompcur	1	
DPCC - Data Representation	11	0dpccurr	1.1	1 sem. hr.
DPCC - Data Processing Concepts	38	0dpcc	3.8	
DPCC - Intro to Programming in BASIC	20	0inbascur	2	1/2 sem. hrs.
DPCC - BASIC Programming Techniques	25	0adbascur	2.5	1/2 sem. hrs.
FORTRAN, Structured	75	0fortc	7.5	2 sem. hrs.
FORTRAN 77, Structured Programming	95	0fortcurr	9.5	3 sem. hrs.
FORTRAN (CYBER) Features	6	0cffc	6	
Pascal	90	0pascur	9	2/3 sem. hrs.
RPG II Fundamentals	48	0rpgc	4.8	1 sem. hr.
PROFESSIONAL DEVELOPMENT				
Building Your Own Business Curriculum	39	0byob	3.9	2 sem. hrs.
Change and Choice	14	0piccif	1.4	
Customer Contact Skills	4	0ccsif	.4	
Effective Sales Calls	10	0salesc	1	2 sem. hrs.
Helping Relationship	16	0cconcern	1.6	1 sem. hr.
Keyboarding for Info. Processing (Gregg)	8	0ckeyrout	.8	
Learning to Learn	8	0learn1	.8	
Overcoming Self-Defeating Behavior	3	0sdbif	.3	
Reading Fundamentals	22	0readfcur	2.2	

Selling: The Psychological Approach	14	0psprouter	1.4	2 sem. hrs.
Selling: The Strategic Approach Curr.	21	0salesif	2.1	2 sem. hrs.
Success	21	0succurr	2.1	1 sem. hr.
Understanding Others	5	0ohif	.5	
Understanding Self	4	0selfif	.4	
Value Selling	16	0valuesel	1.6	2 sem. hrs.
Word Processing	7	0genwpif	.7	
Wang Word Processing System: An Intro	4	0wangwpif	.4	
MANAGEMENT				
Affirmative Action Management	6	0eeoaa		
Better Business Letters	13	0bzletteri	1.3	1 sem. hr.
Communication Skills	3	0icom	.3	1 sem. hr.
Consulting Skills	8	0ptccs	.8	1 sem. hr.
Contract Bidding	2	0cbidgpif	.2	
Effective Supervision	2	0esc	.2	1 sem. hr.
How to Hire a Micro	14	0hirec	1.4	
International Travel Safety	3	0itsif	.3	
Managerial Plan., Org., Control Curr.	35	0mpocif	3.5	2 sem. hrs.
Managerial Success Curriculum	26	0manages	2.6	1 sem. hr.
Problem Analysis and Decision Making	24	0edmif	2.4	1 sem. hr.
Resource Management	16	0reman	1.6	1 sem. hr.
Stat. Methods for Improving Performance	15	0smipc	1.5	
Supervisory Success	7	0suproute	.7	1 sem. hr.
Time Management	5	0time	.5	1 sem. hr.
FINANCE				
Accts. Receivable Collection Techniques	15	0arcif	1.5	1 sem. hr.
Capital Budgeting Curriculum	28	0fincmil	2.8	3 sem. hrs.
Finance for Mgmt.: A Graphic Approach	14	0vbfif	1.4	
Financial Management Curriculum	45	0fmindex	4.4	3 sem. hrs.

Financing for Long-Term Growth Curr.	28	0flcmi	2.8	3 sem. hrs.
Short-Term Financial Planning Curr.	28	0stfcmi	2.8	3 sem. hrs.
Understanding Financial Statements Curr. Understanding the Balance Sheet Understanding the Income Statement Analyzing and Interp. Fin. Statements Funds Flow Statements: Prep. and Uses	28		2.8	3 sem. hrs.

Section IV: GED CURRICULUM

System Overview

The General Educational Development Learning System (GEDLS) is an individualized, computer-based instructional system that is designed to help students prepare for rand pass the General Educational Development (GED) exam.

The GEDLS is divided into six major curricula, each of which is composed of several courses. These courses are, in turn, made up of modules. In five of the curricula, each module contains the following components:

- Learning Activity - This activity is a tutorial lesson that provides the actual instruction relating to the stated objectives.
- Application Lesson - After completing the tutorial, the student is presented with a reinforcement activity to help ensure retention of the material presented.
- Test - This activity is a self-check of the student's understanding of the material presented in the module.

The CYBER network version of the GEDLS was revised in the fall of 1988 to reflect changes in the GED Examinations. The revised GED exams contain items and passages that relate to the role and impact of computer technology. However, the exams do not directly test computer proficiency or computer literacy. For this reason, the revised GEDLS contains a new "user-friendly" Computer Awareness curriculum containing tutorial lessons, but no texts or application lessons.

The GEDLS contains six curricula:

Reading

Writing

Mathematics

Social Studies

Science

Computer Awareness

On the following pages, each curriculum is listed separately. Each listing provides the names of the courses contained in each curriculum, along with a brief description of the course content and the name of the Instructor File used to deliver each course.

The revised General Education Development Administration Guide provides greater detail, including a listing and description of the modules contained within each course. Appendices to the Administration Guide provide detailed directions for creating, setting up, and using CYBER-Based Instruction "group" files to deliver the courses. Only one copy of the Administration Guide is needed, as it covers all six of the GEDLS curricula.

General Educational Development Learning System

Mathematics

Approximate Time: 33 Hours

Course Content:

The GED Mathematics curriculum first introduces the student to positive and negative numbers and simple equations. It then presents more complex problems dealing with equations in two variables, and asks the student to determine area, volume, percents, and angles.

The six courses that make up the Math Curriculum are:

Basic Number Ideas Instructor File: 2zmath1if
Introduces practical, frequently used math skills. Students practice addition, subtraction, multiplication and division of integers, and gain an understanding of sets, variables, and square roots.

Math Sentences, Part 1 Instructor File: 2zmath2if
Teaches how to solve equations, introduces the concepts of monomials and binomials, and requires students to solve some common types of equations.

Math Sentences, Part 2 Instructor File: 2zmath3if
Teaches how to solve equations containing two variables, introduces the concept of the coordinate plane, and gives students the opportunity to solve some common types of two-variable equations.

Geometry Instructor File: 2zmath4if
Teaches about angles, triangles and circles, and introduces the Pythagorean Theorem.

Measurement Instructor File: 2zmath5if
Discusses the basic concepts of metric measurement; provides instructions for determining the areas of triangles, rectangles, parallelograms, trapezoids, circles; presents methods for finding the volumes of cubes and spheres.

Special Topics Instructor File: 2zmath6if
Teaches about percents (including those less than one and greater than one hundred), averages and probability; and defines and shows how to compute the value of means and averages.

Prerequisites: None

Learning System: General Educational Development

Curriculum: Mathematics

	CYBER Network Version	
	Text Component	**Price**
97604031	General Education Development, Administration Guide	12.00
	IBM PC Version (5 1/4" disks)	
97601180	Mathematics Instructional Disks and Texts	495.00

Reading

Approximate Time: 42 Hours

Course Content:

The GED Reading curriculum offers students an opportunity to improve their reading skills. Students will use readings from a variety of materials, including classic literature, poetry, drama, and newspapers. Skills presented include finding the main idea and identifying supporting details.

The six courses that make up the Reading curriculum are:

Practical Reading Instructor File: 2zread1if
Emphasizes daily used reading skills by having students read passages from contracts, magazine articles, recipes and catalogs.

Reading Skills and Strategies Instructor File: 2zread2if
Introduces skills that should help improve reading ability in the areas of math, social studies and science. Students use such reading skills as identifying comparisons and contrasts, cause and effect relationships, and specific details.

Interpreting Literature Instructor File: 2zread3if
Includes identifying the author's style, tone, purpose and making inferences about passages from formal and informal essays, short stories, novels, biographies and autobiographies.

Poetry Instructor File: 2zread4if
Illustrates the differences between poetry and other literary forms, and asks students to identify the rhyme scheme, meter and such types of figurative language as similes, metaphors and personification.

Drama Instructor File: 2zread5if
Introduces various dramatic techniques, helps students interpret the meanings of plays, and asks them to identify such various components as setting, style and tone.

Commentary on Literature and the Arts Instructor File: 2zread6if
This course introduces reviews of literature and the Arts and helps students interpret reviews..

Prerequisites: None

Learning System: General Educational Development

Curriculum: Reading

	CYBER Network Version	
	Text Component	**Price**
97604031	General Education Development, Administration Guide	12.00
	IBM PC Version (5 1/4" disks)	
97600999	Reading Instructional Disks and Texts	495.00

General Educational Development Learning System

Writing

Approximate Time: 46 Hours

Course Content:

The GED Writing curriculum is designed to help students improve their writing skills through practice and recognition of some features of standard writing styles. Students are asked to identify parts of speech, correctly spelled words, formal and informal writing styles, sentence fragments and topic sentences.

The six courses that make up the Writing curriculum are:

Mechanics Instructor File: 2zwrit1if
Teaches simple rules for spelling, punctuation and capitalization and asks students to identify incorrect ones.

Grammar Instructor File: 2zwrit2if
Presents the basic grammatical skills necessary to improve writing, identifies parts of speech, and discusses how to make verbs agree with their subjects and pronouns agree with their antecedents.

Diction and Style Instructor File: 2zwrit3if
Teaches skills to make writing more interesting and effective, shows how to avoid inappropriate language and an over-written style, and asks students to identify formal and informal writing styles.

Sentence Structure Instructor File: 2zwrit4if
Teaches how to make writing clearer by avoiding sentence fragments, misplaced modifiers, run-on sentences, and awkward construction.

Logic and Organization Instructor File: 2zwrit5if
Concentrates on how to write organized, well-developed paragraphs, and asks students to identify topic sentences and to determine whether a paragraph has been developed through example, comparison and contrast, or cause and effect.

Essay Writing Instructor File: 2zwrit6if
Introduces the essay writing process and provides students with strategies for generating an essay.

Prerequisites: None

Learning System: General Educational Development

Curriculum: Writing

CYBER Network Version

	Text Component	**Price**
97604031	General Education Development, Administration Guide	12.00

IBM PC Version (5 1/4" disks)

97601032	Writing Instructional Disks and Texts	495.00

General Educational Development Learning System

Science

Approximate Time: 42 Hours

Course Content:

The GED Science curriculum presents many basic concepts and principles common to introductory science courses. The student studies genetics, cell theory, health, and reproduction, as well as topics in physics, chemistry and earth science. (There are both required and optional modules in each lesson in the Science Course. Students must successfully complete the required modules to gain mastery in each course.)

The four courses that make up the Science curriculum are:

Chemistry Instructor File: 2zsci1if
Teaches about the composition, structure and property of matter, and the symbols of elements and formulas of compounds; presents the properties of an atom; and asks students to identify types of solutions and describe the properties of acids, bases, and salts.

Physics Instructor File: 2zsci2if
Introduces the basic concepts and theories; presents the metric measurements of area, volume, pressure, and temperature; teaches how to classify different states of matter and explains what microwaves are.

Biology Instructor File: 2zsci3aif and 2zsci3bif
Introduces cell theory, reproduction, the nervous system, and genetics; presents such topics as the role of the thyroid gland, the development of diseases, the interaction of people and their environments.

Earth Science Instructor File: 2zsci4if
Focuses on astronomy, geology, and weather; presents the names of the planets in the solar system, the reasons for the earth's seasons, the earth's geological history, and the composition of the oceans and atmosphere.

Biology Instructor File: 2zsci[illegible]f
Introduces cell theory, reproduction, the nervous system, and genetics; presents such topics as the role of the thyroid gland, the development of diseases, the interaction of people and their environments.

Prerequisites: None

Learning System: General Educational Development

Curriculum: Science

CYBER Network Version

	Text Component	Price
97604031	General Education Development, Administration Guide	12.00

IBM PC Version (5 1/4" disks)

97601105	Science Instructional Disks and Texts	395.00

General Educational Development Learning System

Social Studies

Approximate Time: 40 Hours

Course Content:

The GED Social Studies curriculum presents major events in United States history, including the Civil War and the Great Depression, and introduces concepts such as motivation, prejudice, status, and self-esteem. The curriculum also provides instruction in geography and economics.

The five courses included in the Social Studies curriculum are:

Geography Instructor File: 2zss1if
Gives practice in reading maps, graphs, and charts; and shows how the environment, the use of natural resources, and population distribution affect lifestyles.

Economics Instructor File: 2zss2if
Teaches how the production and consumption of goods and services define economic systems, divisions of labor, the causes of depression and inflation, and different economic systems, from communism to capitalism.

Behavioral Science Instructor File: 2zss3if
Teaches students to identify different social institutions, including family, religious and educational ones, and to understand how discoveries, inventions and communication influence social and cultural change.

Political Science Instructor File: 2zss4if
Introduces students to different systems of government; explains how and why power is divided between the three branches of government; discusses the concepts of civil rights and civil responsibilities.

History Instructor File: 2zss5if
Presents the highlights of the United States' development as a nation—from the first settlement in Jamestown to the present—and discusses such topics as social and economic problems, wars, immigration, and urbanization.

Prerequisites: None

Learning System: General Educational Development

Curriculum: Social Studies

	CYBER Network Version	
	Text Component	**Price**
97604031	General Education Development, Administration Guide	12.00
	IBM PC Version (5 1/4" disks)	
97601070	Social Studies Instructional Disks and Texts	495.00

General Educational Development Learning System

Computer Awareness

Approximate Time: 5 Hours Instructor File: 2zclitif

Course Content:

The Computer Awareness curriculum is designed to help students gain a basic understanding of computers and their uses. There is no formal testing in the curricula.

The five courses included in the Computer Awareness curriculum are:

Computers for Anyone
This course shows the level of computer involvement in our society and provides instruction on the functions and parts of a simple computer.

Computers and Employment
This course shows the impact computers have had on businesses and on workers. Change sin the workplace and individual jobs that have resulted from computerization are highlighted.

Social Values and Computers
Points out potential effects of computers on selected social issues such as employment and distribution of wealth.

Personal Computer Uses
Introduces the personal computer, its uses, and its parts. Discusses ways personal computers are used today and provides information on making appropriate hardware and software decisions when selecting a personal computer for a specific set of users.

Computers and the Future
Explores the potential influence the computer will have on the society of the future.

Prerequisites: None

Learning System: General Educational Development

Curriculum: Computer Awareness

CYBER Network Version

	Text Component	Price
97604031	General Education Development, Administration Guide	12.00

SECTION V: GAMES

GENERAL INTEREST

ETC. . .

"etc" is an informal index of popular lessons, games, and notesfiles. Most of these files have not been published by Control Data.

"War Games" Simulation	joshua
Animation of a typical airbase	airbase
Graphics — Samples of PLATO art	art
Sample IQ Test	mensa
Western mining town	drygulch
Notesfile for IBM users	ibmnotes
More games!	games
The Labyrinth Dungeon	labyrinth
Animation in notes (fun picture-notes)	anim
Notesfile for kids	kidtalk
Maps you can use	maps
That's Entertainment	cinema
Stellar War Game	camouflage
Scrabble	scrabb
Multi-user CB Radio	0talko
Notes about dreams	dreams
Inter-planetary Warfare	conquest
Rock 'n Rollers	rocknote
An Electrifying Game	hivolts
A Strategy Game	zonkers
PLATO Homelink User Information Exchange	homelink
Fantasy Role Playing	frp
Mission Impossible and more!	ztypo

GAMES

INDIVIDUAL GAMES

CHILDREN'S GAMES

100 Yard Dash 0dash
Up to 7 people can play, each one betting on a specific runner in the race. Three racetrack selections are available with different odds and risk factors. Players compete to win the most money and be listed as one of the top 25 money winners. For all ages. Open-ended.

Addition and subtraction: beehive game 0bees
Offers a diagnostic test on counting and practice in simple addition and subtraction. Animation of 2-9 bees flying into and out of a beehive. Elementary math students. 5-10 minutes.

Addition: space port game 0port
Game provides drill in addition and subtraction. In a "space port" you are given a number for the "in" gate of the landing spacecraft and must determine the "out" gate for the spacecraft by adding or subtracting. Elementary math. Open-ended.

Coconut story: a math puzzle 0cocos
Through a story about five sailors marooned on a desert island, you are encouraged to develop an algorithm for solving the problem described. General audience. 30 minutes.

Decimals: darts 0ddarts
Practice locating decimal numbers on a number line by determining the balloon's location and throwing a dart toward that location. Elementary math 30-45 minutes.

Fractions: darts 0darts
Whole numbers, fractions or decimals. Elementary math. 40-50 minutes.

Signed numbers: ant hill game 0ants
Introduction to signed numbers using animated animal friends. You must use positive and negative signs to answer addition and subtraction problems. Elementary math. Open-ended.

Spelling: hang a spy 0hangspy
Follows the classic "hangman" game. You guess letters to spell out a word. Each wrong guess adds a part to a drawing of a spy (with a number of different possible faces), until after 10 wrong guesses the drawing is complete and the spy is hung. General audience. Open-ended.

Spelling: ordeal of the hangman 0hangman
Spelling game in which you can either plead guilty and be hanged immediately, or plead innocent and be given six word to spell correctly. A certain number of incorrect guesses are allowed for the letters contained in each word. For every word not spelled correctly an execution takes place. General audience. Open-ended.

GAMES FOR EVERYONE

Aerospace engineering games 0aerogames
Through four simulation games you can tackle simple engineering problems. Airplane games: 1) improve take-off performance: 2) final design of an airplane. Spacecraft games: 1) launch spacecraft to another planet; 2) land spacecraft on the moon. Aerospace engineering students, accelerated high school or college. Open-ended.

Concentration 0concentra
Memory skill game in which you see a board of 59 covered squares, each hiding a picture. There are 28 different pictures and one "free square". You try to match identical pictures by uncovering 2 squares on each turn. General audience. Open-ended.

Crossword puzzles 0crosswdn
Collection of crossword puzzles. You can play the crossword and store your scores. General audience. Open-ended.

Dice game: probability 0noise4
Teaches and demonstrates the principles of signal detection theory. You can play against the PLATO system or against someone else at the same terminal. After each game, the players are shown the likelihood ratios and the beta, which can be used to determine the optimum strategy of play. General audience. Open-ended.

Fun: a collection of games and activities 0fun
20 tasks or puzzles to investigate and solve. Recreational and educational. General audience. Open-ended.

Mental arithmetic: mathreact 0mreact
Provides drills in elem math. The object is to answer a series of 20 problems quickly and correctly. You then see a score based on how long it took and how many questions were missed. General audience. Open-ended.

Number guessing: bagels game 0bagels
You guess a 3-digit number. For each guess a clue is given. The PLATO system indicates "Fermi" if 1 digit is right and in the correct place, "Pico" if 1 digit is right, but in the wrong place, and "Bagels" if no guesses are right. General audience. Open-ended.

Roll'em 0rollem
Dice game in which you try to achieve a high score by adding up "hands" that the rolling dice give you. A "game-of-the-day" gives you a chance to play against others on a common set of rolled dice. Records are kept for the 200 best Roll'em players with the 20 best players' names displayed. General audience. Open-ended.

Token solitaire 0tokens
A game of logic. Out of a possible six pictures, four are randomly chosen and put in a particular order by the PLATO system. You must determine which four pictures were chosen and what positons they occupy. General audience. Open-ended.

MULTI-PLAYER GAMES

ADVENTURE GAMES

Moria 0moria
Depicts the mythical land of Moria, in which characters chosen by the players move through multiple levels of rooms and corridors. The game is an open-ended "dungeon" game, designed to be played by many users simultaneously. Age 10-adult. Open-ended.

BOARD GAMES

Backgammon 0backgam
Computer backgammon offers up to 6 simultaneous interterminal games or 9 single terminal games. You may leave the lesson and resume the game at a later date. You may watch other games and send personal messages between the players. General audience. Open-ended.

Bingo 0bingo
Interterminal game of Bingo that up to 20 people may play simultaneously. The PLATO system "calls the numbers," records the top 40 money winners, and stores their records. General audience. Open-ended.

Go 0playgo
The ancient Chinese board game called "Go". The object is to control territory by placing your "stones" on the intersections in the playing grid. Two may play it as an interterminal game or you can play against the PLATO system. The player who holds the most territory when further moves cannot be made wins. General audience. Open-ended.

Mazewar 0mazewar
Maze game which you can play with one terminal or between two terminals. The object of the game is to race from the starting point to the finishing point in the maze. If the time is fast enough, it is added to the "all-time" records. General audience. Open-ended.

CHILDREN'S GAMES

Deer hunt 0hunt
Simulates hunter moving through the forest in pursuit of a deer. You can compete with 1-5 players at a single terminal or against records of top scoring players at other terminals. All ages. Open-ended.

Drag strip 0drag
Up to 7 people can play, each one betting on a specific driver in the race. Three racetrack selections are available with different odds and risk factors. Players compete to win the most money and be listed as one of the top 25 money winners. For all ages. Open-ended.

Estimation: obstacle course game 0obs
Adding and subtracting decimals. An interterminal game in which you use decimal numbers to move a ball along a number line while maneuvering through chutes and attempting to avoid various "traps". An understanding of decimal fractions is necessary. Up to 4 players can play on the same "course" at the same time, and players may select the level of difficulty at which they want to play. Elementary math. Open-ended.

Fractions: basketball game 0drib
Offers experience in adding and subtracting decimals. An interterminal game in which you use the decimal numbers to move a ball along a number line while maneuvering through chutes and attempting to avoid various "traps". Understanding of decimal fractions is necessary. Up to 4 players can play on the same "course" at the same time, and players may select the level of difficulty at which they want to play. Elementary math. Open-ended.

Fractions: high wire game 0monkey
Allows 3 ways to practice adding fractions with like and unlike denominators. PLATO hides the monkey, play "hide the monkey" with a friend, you hide the monkey yourself. Elementary math. Open-ended.

Make a sentence 0sentences
Allows you to create simple sentences which PLATO animates for you. Can be used in three different languages--English, German, or Swedish. All ages. Open-ended.

Racing game 0racing
Collection of 4 racing games: Horse Race, Drag Strip, 100 Yard Dash, and Pop-a-Wheelie. Each game allows up to 7 people, each staked $100, to play at one time from one PLATO terminal. 3 racetrack selections are available with different odds and risk factors. General audience. Open-ended.

SCIENCE GAMES

Planetary excursion module (PEM) 0pem
"Real time" lunar lander simulation. You may select from 10 possible landing sites and are offered 3 degrees of freedom; that is, you may move your "spaceships" along the x, y, and z axes. General audience. Open-ended.

Projectile mountain game 0physgame
Players take turns trying to hit the top of the other's mountain, from two mountains away. The time limit decreases with successive attempts. The speed of the projectile is measured in meters per second and the angle in degrees. Mountain heights are different for each new game. An on-page calculator is available. High school and college physics students. Open-ended.

Ye olde, original racetrack 0racetrack
Simple simulations of the physical laws governing motion and the laws of thermodynamics. You see a visual interpretation of the important concepts of position, velocity, and acceleration in the racetrack simulation. Maxwell's demon gives a simulation of gas with high and low speed molecules with two chambers. General audience. Open-ended.

STRATEGY GAMES

Airfight 0airfight
Three-dimensional simulation of a dogfight between jet fighters. General audience. Open-ended.

Coordinates: sea battle game 0battleshi
The popular game "Battleship" is used to teach the location of points on a graph. You place ships on a graph and play against the PLATO system. You fire at the opponent's ships by choosing an x, y location on the graph. Elementary math students. Open-ended.

Coordinates: tic-tac-toe 0ccttt
Game of tic-tac-toe using x and y coordinates on a grid. Junior high and up. Open-ended.

Coordinates: torpedo game 0sea
Interterminal game provides practice using decimal numbers to estimate fractional distances on a number line. One player controls a boat and the other has a submarine. Each tries to shoot the opponent's piece. Elementary math. 20-30 minutes.

Empire 0empire
A spacewar game which can be played by up to 30 people at one time. There are 4 teams of players: Romulans, Kazari, Federation, and Orion. Each team initially controls one portion of the universe. Each player controls a starship. A player can fight other ships or try to conquer planets. The ultimate goal of the game is to control all the planets in the universe. A game may continue for several days before one team emerges as the victor. General audience. Open-ended.

NIM 0micnim
A game of logic, involving strategic moves, but also containing elements of chance. The object of the game is to remove individual matches from piles in such a way that one's opponent is left with only one match. The number of piles and matches in each pile is random. Games may be played against players at other terminals, by yourself against PLATO, or between 2 people at the same terminal. General audience. Open-ended.

Wall street 0wallstree
Simulation of stock market transactions. General audience, beginning business students. 10 rounds of various lengths.

BEST COPY AVAILABLE

IESD

INTERACTIVE
EDUCATIONAL
SYSTEMS
DESIGN • INC

310 W 106 Street N Y • N Y 10025 212 • 865 • 3398

MEMORANDUM OF AGREEMENT

To:	Donna Cooper Philadelphia Mayor's Commission on Literacy
From:	Jay P. Sivin-Kachala Interactive Educational Systems Design, Inc.
Date:	January 30, 1993
Re:	IESD Impact Analysis Evaluation for the Mayor's Commission on Literacy Distance Learning Initiative

This document confirms that Interactive Educational Systems Design (IESD), Inc. will design and implement for the Philadelphia Mayor's Commission on Literacy an Impact Analysis Evaluation of a pilot distance learning initiative that tests the effectiveness of home-based, interactive computer-assisted instruction (CAI) for adult learners. This project is being coordinated by the Mayor's Commission on Literacy on behalf of eight non-profit, community-based adult literacy education programs.

The remainder of this document details IESD's plan for the Impact Analysis Evaluation and is divided into three parts:

- Goals of the Evaluation
- Evaluation Plan
- Estimate of Cost

Goals of the Evaluation

The goals of the evaluation will be:

- To determine whether home-based CAI, coupled with classroom learning, results in accelerated rates of achievement in reading, writing, and mathematics skills.

- To relate home-based CAI, coupled with classroom learning, to specific areas of achievement -- as perceived by teachers and students.
- To determine whether home-based CAI, coupled with classroom learning, results in higher student motivation and more positive attitudes toward learning.
- To determine whether home-based CAI, coupled with classroom learning, results in increased student self-esteem.

Evaluation Plan

In this section, we describe the evaluation plan in detail.

Preliminary Data Collection

In mid December 1992, we met with representatives of the Mayor's Commission on Literacy and the participating adult literacy education programs. The purposes of this meeting were:

- To learn as much as possible about the differences among the programs involved in the project.
- To present evaluation issues and options, and to gain the input of the participants.

As a follow-up to this meeting, representatives of the eight participating adult literacy education programs were asked to provide detailed information about their programs in written form. Their responses were analyzed by IESD.

Testing Instruments

IESD identified, analyzed, and selected testing instruments to meet the goals of the proposed evaluation.

Achievement. To assess achievement in reading and mathematics, the *Test of Adult Basic Education (TABE) Survey Form, Locator Test and Level E, M, or D* (CTB MacMillan McGraw-Hill) will be administered as a pre- and post-test.

To assess achievement in writing, essay tests will be administered as a pre- and post-test, using topics provided by the GED Testing Service. Each test will consist of two essays, which will be scored by an independent agency trained in the holistic scoring technique used by the GED Testing Service.

In addition to these formal assessment tools, IESD will construct survey instruments that will capture teacher and student perceptions of achievement over time.

- Teachers will periodically identify specific concepts and skills that were covered in class and indicate the percentage of the class achieving mastery. For broad skills for which gradual improvement over time is the goal (e.g., reading comprehension; writing) teachers will assign each student an improvement rating, using a 5-point Likert scale. Teachers will also explain their ratings, citing specific examples of student improvement.

- Students will periodically assign themselves improvement ratings for reading, writing, and mathematics, using a 3-point Likert scale, and will indicate what they think are the causes of their improvement (e.g., adult education classes, using the computer at home, other factors).[1] Students will also be asked to identify their personal learning goals, to assign themselves improvement ratings for these goals (using the same 3-point Likert scale), and to indicate what they think are the causes of their improvement.

Motivation and Positive Attitudes Toward Learning. Retention rate will serve as a measure of student motivation to build literacy skills.

In addition, a modified version of the *Survey of Study Habits and Attitudes, Form C* (The Psychological Corporation) will be administered as a pre- and post-test to assess changes in attitudes toward learning.

Self-esteem. To assess changes in student self-esteem, the *Culture-Free Self-Esteem Inventories for Children and Adults, Form AD* (Pro-Ed) will be administered as a pre- and post-test.

---

1. Adapted from a method described in D. D'Amico-Samuels, *Perspectives on Assessment from the New York City Adult Literacy Initiative: A Critical Issues Paper* (New York: Literacy Assistance Center, November 1991).

Additional Data Collection

The Commission staff monitor will provide IESD with monthly time-on-task and lesson mastery data for all work completed by students on the home computers.

Evaluation Design

As indicated above, the evaluation includes a pre-test (January 1993) and a post-test (June 1993) for:

- Achievement in reading, writing, and mathematics
- Attitudes toward learning
- Self-esteem

Normative data exists for the *TABE*, the *Survey of Study Habits and Attitudes*, and the *Culture-Free Self-Esteem Inventories for Children and Adults* to allow for comparisons of the students receiving the experimental treatment with other students.

In addition, some of the adult literacy education programs participating in the project will provide control groups. IESD will oversee the selection of control groups so that they match the experimental groups as closely as possible in terms of current achievement level. For the participating students attending these programs, the following research questions will be asked:

- Does the experimental treatment group demonstrate significantly greater gains in reading, writing, and mathematics skills than the control group?
- Is the retention rate of the experimental treatment group significantly higher than that of the control group?
- Does the experimental treatment group demonstrate significantly greater improvement in attitudes toward learning than the control group?
- Does the experimental treatment group demonstrate significantly greater improvement in self-esteem than the control group?

IESD will conduct statistical analyses to answer these research questions.

Finally, the data collected from the teacher and student survey instruments will be analyzed to identify specific areas of achievement related to the instructional objectives of each adult literacy education program and to the personal learning goals of students. As part of this analysis, we will compare the data collected from the teachers and students to monthly time-on-task and lesson mastery data for all work completed by students on the home computers. Process evaluation data provided by Drexel University will also be considered in this analysis. We will look for patterns of achievement related to the use of the home computers.

Ongoing Communication with Drexel University Process Evaluators

IESD will maintain ongoing contact with the Drexel evaluators to keep abreast of program changes and software or hardware problems that may impact on the outcome of this initiative.

Analysis Report

We will prepare a written analysis report presenting and explaining our findings. This will be submitted to the Commission in July 1993.

Debriefing the Commission Staff

After submitting our report, IESD analysts will be available to answer any questions the Commission staff might have. If desired, a formal debriefing session can be arranged.

Estimate of Cost

For consulting services as Impact Analysis Evaluator for a pilot distance learning initiative that tests the effectiveness of home-based, interactive computer-assisted instruction (CAI) for adult learners.	$15,000.00

The above estimate will be distributed as follows:

Completion of pre-testing	$5,000.00
Completion of data collection prior to post-testing	5,000.00
Submission of analysis report	5,000.00

The estimate does not include the cost of any third-party testing instruments available for use on a fee basis.

It is assumed that the written evaluation report will focus on the presentation and explanation of IESD's analysis and findings. While it may refer to data provided by Drexel University's process evaluators, the IESD report will not summarize Drexel's findings.

Jay P. Sivin-Kachala

Jay P. Sivin-Kachala, IESD

Donna Cooper, Philadelphia Mayor's Commission on Literacy

ATTACHMENT 5:
TEACHER LOGS

Power Learning Project: Center for Literacy
December, 1992 - July, 1993

John Houghton, VISTA
Technical/Administrative Support, CFL
Instructor (Beginning 5/18/93)

December, 1992:

Twelve Macintosh Plus computers with external hard drives were delivered to CFL on December 4, 1992, ten days or so after the original delivery date. On December 8, the computers were delivered in turn to the CFL adult basic education class at Nicetown Boys' and Girls' Club (for class selection, see CFL Education Director). After a preliminary demonstration on how to set-up the computers and a very basic introduction to accessing the software ClarisWorks, the computers were distributed to the eleven members of the class. The demonstration on how to set-up the computer consisted primarily of identifying the various parts of the computer (i.e., the CPU, the internal and external disk drives, etc.), and how to connect the CPU to the peripheral parts. Supplementing this was a handbook developed previously by CFL with support from the Fels Foundation. As for starting the ClarisWorks software, the handbook as well as blackboard use generated a list of necessary steps. Each of the learners in the class received a copy of the handbook and took notes from the blackboard. For a number of the learners, clearly distinguishing the start-up or system disk from the ClarisWorks or application disk, and the appropriate drive for each, caused some lingering confusion about how to get started. These issues occupied much of the class time prior to the Winter Holidays break. In all the class met and discussed the Macintosh and ClarisWorks environment and interface five times before the vacation (Many of the learners initial reactions to their new computers are documented in observations they wrote).

Because of the wish to make the computers available over the winter break, some aspects of the introduction to the Macintosh and ClarisWorks suffered from a less than comprehensive and systematic overview - specifically, the presentations were hurried. The class benefited, however, greatly from the use of a Macintosh at Nicetown Boys' and Girls' which was actually the computer intended for the twelfth learner in the program. Those learners who did not attend class consistently split among ability levels, and a couple of the lower level students did not, subsequently, begin using their computers. One student's Macintosh failed to work and several learners' encountered problems with their keyboards. Each of these technical setbacks was immediately addressed by the Mayor's Commission on Literacy. Just before leaving for the holidays, CFL and the learners signed an agreement or a contract setting forth the terms of the project (along with computer serial numbers for insurance purposes). Also, fourteen modems were given to CFL at MCOL on Monday, December 21, the day of the meeting with the independent evaluator. In response to the meeting with the evaluator, CFL submitted a list of questions for the self-esteem, motivation component of the testing.

January, 1993:

Class resumed on Tuesday, January 5, 1993. Due to a variety of reasons, including hospitalization to employment, attendance on the whole for the month was uneven. Much of the computer class work comprised of responding to individual questions with the exception of introducing additonal ClarisWorks functions, such as changing font size. Disk use continued to present trouble for a number of the learners. In particular, several learners consistently opened the start-up disk instead of the ClarisWorks disk, and would proceeded to open the MacPad communications application rather than the ClarisWorks application. This manifest itself when learners hoped to print their work from home on the printer at Nicetown Boys' and Girls';s' Club. Several learners also ran into difficulty with ending their computer use. In some instances, the system folder or the ClarisWorks folder was dragged into the trash can and erased. The last two-and-one-half classes of January were dedicated to administering the various testing instruments provided by the independent evaluator. On Friday, January 29, at a meeting at Drexel, new start-up software for the learners was distributed.

We continued to experience difficulty with various computer parts and exchanged with MCOL. Responding to lingering confusion about ClarisWorks - i.e., everything from opening the application to editing to saving - a brief step-by-step reference sheet was written for the learners. The TABE test proved quite time consuming even with MCOL's permission to use level "E" instead of the evaluator's prescribed levels "M" or "D". In addition, concerns regarding individual privacy were expressed about the "Self-Esteem" inventory. Inconsistent attendance is lengthening the testing process as well. A side observation on the testing environment - The teacher of this class played down the significance and relevance of the testing in general to the learners, at some points describing the tests as "stupid". (At several points during the writing of this log, I deemed the instructor's comments and/or actions detrimental to the prospects of the project. ***However***, when I began substituting for the instructor in the middle of May, I found myself not promoting the project as I thought I would, and expected the intructor would. See notes, June 1 and June 8).

February, 1993:

More testing during the first week of classes. Again, uneven attendance prevents - because of the presumption on my part that the pre-testing needs to be completed prior to modem use - us from moving along to the modems. Attendance is affected by everything from part-time work opportunities to hospitalization to family members' illnesses.

Several of the learners have explored, on their own, other functions of the computer including copying and erasing files. This has led in some cases to the loss of work and applications and the reformatting of disks incorrectly (In hindsight, I should have "locked" those items). Several learners discussed family members' interest in the computer, particularly children who have had exposure to computers at school. The continued availability of the computer and the printer at the site has been extremely helpful. Learners often request individual instruction time on the computer during class to work out concerns. Also, learners enjoy tremendously the opportunity to receive hard copies of their work. One woman recently made invitations for her son's birthday party, and in doing so, expanded her understanding of the computer and the application.

During this period, I have spent time previewing the CYBIS system and in particular, approaching it from the learner's perspective. This included working through some possible technical difficulties with Drexel, i.e., the "call-waiting prefix." Based on the earlier experience with ClarisWorks, step-by-step reference sheets were developed for the learners.

We finally introduced the modems to a small class of five learners (Thursday, February 18). This group, interestingly, spanned the ability levels of the overall class. The size of the class this day worked well given all the information we needed to cover - the learners were responsible for setting up their own modems at home so the entire process of initiating modem use required review.

Due to external circumstances, i.e., jury duty, the other members of the class received their modems on the Thursday, February 25. The class period, like the previous week's, consisted of walking through the set-up procedure and then giving everyone a chance to dial the system, sign-on and create a password. Some of the learners found this to be fairly straightfoward. Nearly everyone, though, experienced difficulty in creating a password and checking it as the system requires. The problem lay, so it appeared, in the interaction between the learner and the keyboard. Either the learners held the keys too long or the keyboard was too sensitive. Nevertheless, as with 'locking' the applications, this situation could be remedied by adjusting the 'key repeat rate,' though for each learner.

In addition to introducing the start-up and sign-on procedures, we discussed the layout of the system and educational software. On explaining the route the data followed, one learner exclaimed, "Wouldn't it be great if we could move that fast?!" I explained to the learners that the courses involved a pre-test, practice lessons, and a post-test. Also, the testing was for no one but themselves and generated the courses and the practice lessons learners might find most interesting. Together, learners took turns beginning the math courseware and seemed to enjoy it. A number of learners stated how exciting this was and indicated that they couldn't wait to work on the system at home. Several of the learners expressed such excitement but also talked about their concerns. One gentleman said he was certainly comfortable about the start-up and sign-on procedures but needed someone at home to read the various screens with him. One woman said that she would just keep practicing and practicing, trying and trying until she learned it. A side observation - during the description of the courseware, the skill level of many of the introductory exercises was, essentially, ridiculed by the educator, only to have the learners express interest and excitement about the total experience, whether or not the exercises were found to be simple. I thought it was odd that the criticism was introduced; it became all the more perplexing when the students expressed their pleasure with the experience.

March, 1993:

The first meeting in March, March 2, continued the introduction to the modem. Over the weekend two students called to ask why they could not access the system. After reviewing the set-up and sign-on procedures with the students, I was not to hear from the learners until class on Tuesday. Both indicated that indeed there had been a mix up in the set-up, though during class we discovered that there was still confusion about the sign-on process. A number of students wrestled with their user name, their user group and their password, often using the password in place of the user name. Several learners practiced accessing the system. Very few referred to their step-by-step sheets; subsequently, many were tentative. One woman said she would stay with word processing until her daughter could help her with the modem. Another woman wanted to review the start-up procedure to access ClarisWorks.

Just a few learners, three, attended class on Thursday, March 4 (weather, doctor appointments, part-time work opportunities). With those that were there we spent the better part of an hour and a half practicing sign-ons and beginning course work. Although they appear comfortable with the basic operation of the system, there still seems to be a fair amount of trepidation - three levels, high medium and low, were represented by the learners present. I've been surprised that some of the higher level learners haven't accessed the system despite expressing real enthusiasm for it. On Friday afternoon, I received a phone call from one learner who did not understand why she could not enter the system. She has two phone lines so she was able to look at the computer while we walked through the necessary steps. Three problems were identified: First, she was using her password when prompted for "user name;" second, she pressed "next" after being prompted for "user group" (the system requires "shift-stop" and states so on the screen); third, when asked for "password" she was using the wrong word. The learner, as all learners in the class, possessed a customized step-by-step check list, i.e., specific user names were included, but did not use it. Nor, apparently, did she avail herself of the directions on the screen (this woman would rank in the upper half of the class in terms of reading). About half an hour later, this same woman called again because she had exited the system and was having difficulty re-accessing it. The problem, and she identified it, was that she had misspelled her user name and after inputting the user group, received the message that there is no such user name in that group. The system at this point allows the user to either change the user name or change the user group, but the learner did not take advantage of this. I asked her what the screen suggested and she answered that she did not know.

Tuesday, March 9, was probably the most productive day so far. With some eight learners attending more of the pre-testing instruments were completed. Interestingly, one could really sense the bond between the teacher and the learners as they worked through a survey together. She is clearly interested in them and on their side (I mention this only in terms of what affect this might have on the project). The survey, estimated to take twenty minutes to complete, actually required over ninety minutes. In order to complete the survey, the instructor had to read each the questions aloud. After that several of the learners spent the better part of two hours practicing on the system. The woman who called on Friday indicated at the beginning of the class that she did not like the system. She said that the system started her on a different unit each time she signed-on, and that some of the courses and games were not available to her. We spent some forty minutes together and learned a couple of things: When the CYBIS title screen appears for signing-on purposes, she read the number of users currently on the system as the unit number of a course. Subsequently, as the number of users on the system varied she was under the impression that the system was taking her to a different course or exercise. In addition, when she started a game, e.g., bingo, she could not get beyond the first screen. As in other situations, this learner did not read the directions appearing on the screen. Speaking of instructions and directions, another woman, who is also among the stronger readers in the class, recounted her difficulty with starting the system without the help of her grown daughters. She stated explicitly that she had trouble following directions. This woman and three other learners worked on the modem and appeared to be gaining confidence. One man, who has expressed his excitement about computers from the outset but who has missed most of the class time due to part-time work opportunities, really enjoyed his first "official" exposure to the system. He loved the graphics, was thrilled about working on math exercises, and immediately went to the course on computer awareness and the section on computers in the workplace.

Just four learners attended class today, Thursday, March 11. Approximately one and a half hours were spent on modem use and CYBIS instruction. Three of the learners had yet to access the system on their own at home, the fourth was the man described in the foregoing paragraph. One man, who had yet to sign-on and create a password, was anxious to get started because he was hoping there would be plenty of spelling exercises for him. He had to review the set-up of the modem and the start-up/sign-on procedure. The placement test for the language arts course was the first activity he encountered and after some thirty minutes, he was still at it. The wording of the questions themselves caused great difficulty for him as well as the wording of the directions. I told him if he finds this too time consuming and he knows that he wants to work on the first module anyway, than he can just answer randomly and finish the test. He liked that suggestion. The other learners, medium to lower level readers, found the screens perplexing or busy as well - they tried reading every word on the screen, which in most cases is unnecessary and generates frustration and confusion. It must be added, though, that all four learners were experiencing some trouble with their eyesight. One man has lost his glasses, another has had the same for as long as he can remember (he's sixty-six) and knows he needs a new prescription, a third man is wearing a pair of glasses he found in a bathroom and says work all right, and a woman has submitted an application (?) for a new pair of glasses with an improved prescription. In general, however, the class went quite well and each of the learners appears to be growing in confidence and more comfortable with the system. It will take time.

Tuesday, March 16, class was cancelled due to snow. Message on answering machine from one of the learners. I spoke with the learner, a woman who has worked the most on the system to date, and she described several incidents where jagged or crooked lines appear on the screen and her commands freeze, I asked her whether it was possible that someone else in her house may have inadvertently picked up the phone and she said that was impossible since there is just the one phone for this line. She expressed a great deal of frustration commenting that her house is very busy, an extended family living together, and when she does reserve the time to use the phone line, it is awfully defeating to have the system freeze on her. Her voice hinted at reaching the point where she could not continue. I asked that before the next class would she try the system again to see whether it continues to interrupt her. She said she would.

Class on Thursday, March 18, was attended by only two learners. One woman enjoys using ClarisWorks very much but has only used CYBIS when one of her grown daughters is at home to assist her. She is the same woman who has expressed difficulty following instructions so we spent some practicing the sign-on procedure (this is a learner who will most likely benefit a great deal from the revised sign-on software). Otherwise, she is very excited about the available curriculum. The other learners, also a woman, has used her computer sparingly, though she has recently asked more questions. Today, I spent forty-five minutes with her reviewing ClarisWorks briefly, so she could reformat a document, and practicing CYBIS. By the end of class, when the other woman was working on CYBIS, she provided many directions and exhibited a fair amount of confidence. During the use of CYBIS today at Nicetown, the screen was interrupted three separate times with same symptoms as those described at the one woman's home. I thought at the time that this was just interference, but at the monthly meeting, attended by the representative form IMSATT, I was informed that those type of disruptions should not occur. I related CFL's incidents to Drexel via p-note.

Also, at the monthly meeting, it became quite apparent that CFL needed to address the issue of learners' use of the computers. Unless the situation changes dramatically in the next few weeks, several of the learners will clearly not satisfy a minimum requirement, whether it is three hours or six hours. This issue of a minimum amount of time was not included in the contract CFL signed with its learners - really, the attendance provision was aimed at the participation question. Nevertheless, this, the issue of the twelfth CFL learner, and how long CFL will continue the project were issues I placed in a memorandum to the educator and the supervisor. Listening to the others at the monthly meeting, it is clear that greater structure - dedicated times to be on the system as a class, positive reenforcement - enhance the use of the system. I will introduce some of these into the program starting next week.

Tuesday, March 23, started out as potentially an important day. Although I was prepared to *race* ahead to additional features of CYBIS, e.g. term-talk, term-ask, I had hand-outs ready, I was moving too quickly. Of course, the issue of minimum time was first and foremost. The teacher made an excellent suggestion whereby the learners experiencing difficulty could be paired with learners more comfortable with the system. Furthermore, if it came to pass that one or two learners relinquished their computers, the teacher knew of the possibility of more learners joining the class. The issue of minimum time was broached with the seven learners who attended class, and an approximate solution was sketched. One woman would try, for the time being, to work on the system with her son-in-law, who is also in class and who is furthest along. She said she would also try to work with another woman who has ventured a little on the system with the help of her grown daughter. The woman who called last week describing system problems returned to class today and had not tried

CYBIS since our telephone conversation. She had out-of-town guests and had to use her computer table for other purposes. She explained that the situation at home was not working and wondered if she could use her modem at the class site instead. The teacher and I agreed to that arrangement. If it is at all possible, we will try to keep a Mac with modem at Nicetown. Continuing with the partnerships to improve the use of CYBIS, one man, who understands the mechanics but has difficulty with the reading, will be paired with a woman who said she twill try to visit his house weekly and work with him.

It was learned that two woman have been sick, explaining their absence form class. One case is particularly serious, hospitalization for heart trouble, and this presents a tricky situation. No one is present at her home to allow us to retrieve the computer. We'll have to wait and see how this develops.

During class time, two women worked on the system, the one who experienced trouble at home and one who hadn't accessed the system as of yet. The latter woman is a high level reader and we worked together through some lessons. She also went through a period of illness and on top of working, cares for her mother who is a stroke patient. The question for her is whether she will be able to set aside the time. The second woman, who has used the system at home quite a bit, talked about how slow the response time was when she selected commands and/or answers. Several times, she would press "Next" twice or more and end up some place other than where she intended. She also went directly to the exercises, instead of taking the pre-test, and then became frustrated with the quality of the lessons. We talked about taking the pre-test and she found that it made sense to do that first. Finally, several learners are still having difficulty locating a place in their homes where they can place the computer with the modem. Extra long phone cables seem to be the answer.

The momentum generated during the last week or so appears to continue, Thursday, March 26. I don't want to jump the gun and become overly optimistic, but the utilization of the computers now looks to be a more important priority among all. New relationships or partnerships are taking shape, with the man who has difficulty reading the screens pairing with another man instead of the woman as originally planned. The higher level woman discussed in the previous paragraph was anxious to practice starting CYBIS; went through the procedure with ease; and made an informal arrangement with another woman in case she required some assistance. This "collaborative learning" really has energized the classes interest in using CYBIS. It will be interesting to see whether or not it develops. I've held off on distributing the material concerning "term-talk, term-ask" because I think these very basic and yet essential ingredients need to time to activate. If a primary goal is for the learners to become comfortable with the general operation of CYBIS, so that they may use it, then what must happen is not necessarily linear. As soon as the entire class is comfortable with CYBIS, I hope that we can use the notes files to actively engage each other about our thoughts of the project.

In class, three women and two men used the system. I am fascinated by the process unfolding, particularly when the learners demonstrate an almost unconscious facility with certain Mac skills. A number of times over the last month especially, and this means the better part of two months since we began, the learners have displayed a genuine confidence working with their computers. I am starting to see an inkling of the same with CYBIS, after approximately a month. Perhaps in another month, they will be as they are with Mac skills. Time and patience.

I was unable to attend the class on Tuesday, March 30, due to a site visit at CFL Headquarters by the ACTION Office. However, the instructor called me early in the afternoon to report on what took place during class. Let me go back for a minute. On Friday evening, March 27, I received a couple of phone calls from one man who, as of yet, has not accessed the system at home. He told me that when he "double clicked" the CYBIS start-up document, the screen returned that it could not find the modem. We talked about the set-up of the modem and he said he would try once more. When the instructor called me on Tuesday, then, she reported that the man and three other learners were unable to access the system from the class site. They would make it through to the password prompt, but for each of the them CYBIS would not accept their password. I called Ben and we both tried logging-on with the man's sign-on and we were both able to get through. That night, this same man called me and said he still could not access CYBIS, that he received a voice message indicating that the call could not go through at this time. I immediately asked about call-waiting thinking that the "*70" prefix was the cause. He has call-waiting but his phone is also a rotary phone. So, we needed to change his network start-up, but as I learned on Monday, it was not merely a matter of clicking the pulse radio dial instead of the tone radio dial, but we needed to replace the "*70" with "1170." We began to make these changes when he decided that he wanted to wait until class on Thursday. I was aware of the "*70," "1170" switch because a woman, who has a rotary phone, called me on Monday and we arrived at this solution. This, by the way, is the one of the learners who back on February 25th expressed such enthusiasm for the system. Between that last week in February and now, her father has been quite ill and she hasn't had time to set aside for the computer. Since Monday, though, and this is certainly a case for patience, she has spent nearly six hours on CYBIS - more time than anyone else! As for the passwords not working, Ben called me this morning with no further information regarding the possible cause.

April, 1993

I've been waiting to introduce additional features of the system, everything from personal notes to term-talking. Many of the learners, though, I would say six out of ten, are still not entirely comfortable with the sign-on and the general operations of the system (Drexel suggested this morning that I go ahead and introduce new topics with the idea that it will take some time anyway). A couple of learners, today when we working together, expressed confusion about the various commands, particularly when and when not to use shift with a command, how many times to press a command (for instance pressing or clicking twice) and for how long one holds down a command. This last action, holding down a key, created a great deal of trouble during a placement test one woman was taking. She would hold down a key for longer than necessary and the system evidently counted the time as a certain number of keystrokes and change the answer back and forth. Two men also worked on the system during class time. The man who was experiencing the difficulty at home due to the rotary phone selection and I worked together altering his start-up document, including using the latest "Intelligate5" commands. It worked fine at the Boys' and Girls' club and hopefully, he will be able to access the system at home. The other man is the one who wants someone to assist him in reading the screens. We spent the better part of an hour completing the placement test for basic reading. He really demonstrated that if he received some assistance with the reading, he not only wanted to spend time on the system, but that he was very capable of answering the questions. The degree of separation is so slight.

The woman who worked on the system for so many hours earlier in the week has called me twice this morning, Friday, April 2. She is working at another woman's house to help that woman get started on the system. Both women are strong readers; the woman being assisted, the same woman whose mother is a stroke patient. Anyway, they ran into a situation where the computer kept trying unsuccessfully to dial CYBIS. I suggested that they double check all of the cables and try again. They called back some fifteen minutes later having connected with the system. The problem they discovered was an adaptor at the phone jack. They removed the adaptor and connected the phone cable directly into the wall and it worked fine. They quit the system after just a few minutes because it was so slow. They would wait until after business hours to use the system.

The April 6 class meeting followed along the same lines of previous sessions. The man who needs assistance reading the screens and I worked together on the system for some forty-five minutes. He still plans to use the system at home, although up until now he has needed an extra phone cable to connect his modem from his living room to the open jack in his basement. The woman who lives in the extended family apartment and plans to access the system from the Boys' and Girls' Club is lending her telephone cable to the man. I was out of town for the April 8 class.

Few people accessed the system over the Easter weekend. One man, the man who experienced trouble connecting from home at the end of March, used the system quite a bit which is encouraging. He expressed a real interest at the outset and it's gratifying to see him at least be able to explore his expectations. The woman whose father was ill and did not starting using the system until the end of March continues to be a strong user logging several hours per week. It should be noted that in addition to caring for her father, this woman works night shifts at a nursing home sometimes working from the late afternoon until the following morning. The very fact that she makes time for the computer, usually from midnight to three in the morning, is really impressive. A couple of other learners signed-on but did not stay on the system in the way the aforementioned man and woman.

Classes for the week of April 13 did not include actual time on the modem. Several learners had questions, ranging from a malfunctioning keyboard to how to exit a course and return to the "Main Menu." Four women scheduled time on a Wednesday afternoon to meet at one home to work on the computer. One is the woman who has spent the most time on the system in the last month and the others are anxious to work with her. This woman, as it was mentioned earlier, is one of the two strongest readers in the class. I learned on Thursday that they spent approximately an hour and a half together and one woman told me that she planned to schedule a regular meeting with the more advanced woman. On Thursday, April 16, two learners and I attended a MCOL gathering with representatives of Bell of PA and Bell Atlantic. In all, there were some eight learners in attendance. It was quite apparent that the other learners were generally more familiar with computers - interestingly, I learned during lunch that the woman who has progressed rapidly in the CFL class has a computer of her own at home - and were in higher level classes, i.e., most were preparing to take the GED. The other learners also talked about how they have used the interactive communication features of the system, and I felt badly that I hadn't introduced that yet to the class. Again, I've been waiting for a majority of the learners in the class to achieve a certain level of comfort. It is definitely time to go ahead and introduce the material, not because of the comfort level but merely to let those who want to, go ahead and try it, and also, perhaps, as a motivator for the others. One final note, we continue to wrestle with the requirement to have a full twelve learners participating and to have those learners using the system on a consistent basis. The educator has invited me to talk to the class next Tuesday on the issue of "use."

For Tuesday, April 20, I was prepared to level no holds barred with the learners about system usage. The instructor and I spoke about the necessity to do so and she felt it might be better to come directly from me. I agreed, but when I arrived for the class on Tuesday, she had already started the discussion with the class. Actually, her comments were in conjunction with overall goals for the class, i.e., reading, writing, etc., for the next month. The instructor was reviewing the time spent by each of the learners as recorded in one of the system's files. Unfortunately, the file to which she referred documented system time in the learner's user group and did not include system time in a given exercise. In spite of this, it was agreed that if in the next two weeks the computers were still underused, then it would be time to allow other learners to have them in their homes. Two of the women, who have worked together in trying to master the system, recounted experiences where certain commands were not working for them. In particular, they were having trouble with the

CYBIS command "ANS." They and the instructor wondered if something was wrong with the system since it allowed them to do everything up until that point. I understood that some system software was causing troubles with keyboards and I figured if indeed they were pressing the correct combination of keys, then that might be the source of the problem. In class, it was soon discovered that both women were using the wrong combination of keys. In fact, what they did was hold the command and shift keys down and then press the letter choice of their answer. The women learned the appropriate combination and practiced in CYBIS exercises. One woman had to refer constantly to the CYBIS command key for each question and answer. She also had difficulty recalling easily what needed to be done after she answered each question, namely press "Next." This is the same woman who commented on her difficulty following directions at the outset of the project. The other woman, interestingly, asked if it was possible to communicate with other members of the class over the system. I felt as though I had this enormous pressure relieved. For weeks, I have toted a folder full of instructions on how to use the communication features to Nicetown only to encounter a slew of much more basic questions. I jumped at the opportunity and immediately described to her the the general concept. Then, I gave her the guidelines I had written and told her that maybe next week we could test it between CFL headquarters and Nicetown. An aside: The courseware and classroom work have not been integrated at all, and I have to think this has been a real drag on subsequent system use. This and the class structure: The full spectrum of skill levels, uneven attendance, and an open curriculum.

For Thursday's meeting, April 22, the class had a guest speaker, after which some time was spent on the system. Actually, between this class and the last, on Tuesday evening and on Wednesday, I had two experiences with learners. On Tuesday evening, during my regularly scheduled system time, a learner from CFL was on for the first time. The learner was the same woman who asked about "term talking" in Tuesday's class so I thought, just maybe, she might respond to the paging. I tried but she did not respond. It was possible that she was away from her computer so I checked in several times over the course of the next hour without an success, and oddly enough, for the entire hour she never left the user group. The cynic in me wondered whether this woman merely turned on her computer and signed onto the system in response to the instructor's earlier comments. The other experience involved a telephone call I received at work on Wednesday. The woman calling remains somewhat of enigma for me. Quite comfortable with the system, s she demonstrates in class sessions, she repeatedly states that "today" will be the day she goes home and works on the system. It hasn't happened yet. Anyway, she called because she could not find the CYBIS folder when she opened her start-up disk. Rather, she related to me what was on the screen: the system folder, MacCYBIS Help, and MacCYBIS. No "Power Leaning" document. In her words, "the computer did something." She asked, "Why did the machine take it from me?" I tried explaining that the computer was not really doing something to you, in the sense of against you, which her tone of voice clearly indicated. I told her if she brought her disk to class on Thursday, I would fix it. She said fine, and I thought, "an opportunity missed."

In class on Thursday, after the guest speaker, several learners and I worked on the computer. One woman, the higher level reader whose mother has been ill, was still having difficulty operating the system. The CYBIS commands, in particular, were giving her trouble - when and when not to use the "ANS" key and when the command key was required. For instance, in selecting an option from one of the menu screens, she would hold the "command" key in conjunction with the "letter" key and thus void her choice. That was quickly cleared up and then one man, who needs assistance reading the screens and who is eager to use the system, worked on the computer for some twenty minutes. He really enjoys the system and does quite well when he receives some assistance in reading the questions. The last computer activity involved fixing the woman's disk who called me on Wednesday at work. The problem was that the CYBIS folder and the "Working Power!" document had been separated from MacCYBIS and MacCYBIS Help, and dragged into the "System" folder. After the disk was reorganized, she indicated that now, she would start using the system. One other woman, a woman who had been in the hospital for the better part of February and March, received her first exposure to the set-up. Although she may have been there for one of the earliest modem sessions, certainly, some six weeks or so had passed. Before accessing the system with her, I wanted to make sure she was comfortable with the physical set-up. We went through it together and she sounded quite confident about it. After that we reconfigured her system start-up document so that she could access the system directly.

Tuesday, April 27, was largely a lost day. The phone line was dead at Nicetown so we were unable to access the system. Something I did come across during the time we spent checking people's disks - a number of learners reported they were still experiencing trouble starting, and the only problem I could check immediately was the system start-up document - was that most of the learners left the CYBIS folder window open when they turned off their computer. Honestly, I don't know whether they select "shut down" or not from the "special" menu before turning off their Macs. Anyway, leaving the CYBIS folder window open returned them immediately to the point where they could simply double click on the "Power Learning" or "Intelligate" document and access the system. When I first transferred the new "Intelligate" software to the learners' disks, I left the original "Power Learning" document in case the new start-up document did not work. I told the learners about this but evidently a number of learners continued to use the original document and encountered difficulty logging-on to the system. This time, I erased the original document so there would be no confusion.

For the remainder of the class, I worked with two women. The first is a woman who just in the last month or so has rejoined the class on a regular basis. She is a fairly strong reader and the system shouldn't present her with any extraordinary difficulty as far as reading the screens. However, for whatever reason, she has not spent the time learning the beginning steps. When we discussed her experiences with IMSATT, she told me that her disk was not working. I understood that she was still working off the original start-up document. However, when we initially tried accessing the system, before realizing the phone line was dead, she told me that what was happening on the screen was what would happen to her. Then, when I discovered that the line was simply dead she kept telling me that the phone bill needed to be paid. I assured her that the agency paid the phone bill and generally, to be honest, became impatient with her "explanation" for everything. I reminded her to bring her start-up disk next class and I would change it to the "Intelligate" document. The other woman, the woman who spent the better part of February and March in the hospital, was interested in reviewing the set-up one more time. We walked through the various connections and came across a trouble spot inserting the modem cable into the back of the computer. The end of this cable is the same as the one for the printer port and we spent approximately twenty minutes practicing the action of lining up the end and carefully sliding it into the port. She would consistently lift the end to a 45 degree angle and try to force the connection.

Thursday, April 29, witnessed more time with the aforementioned woman and another woman who had been helping her outside of class. They had some questions about the former's modem believing it did not work. They had worked together to access the system and their conclusion was that the modem was somehow broken. The modem was fine and the women worked on the system for the better part of an hour. Actually, this was the one woman's first true experience with the system and she managed it well for the most part. She did have difficulty with how the format of the questions, i.e. multiple choice and that selecting option "a" did not mean you wanted to place an "a" in the given question's blank. That type of 'mechanical' question popped up repeatedly as well as trouble she had reading the various questions. As far as the woman's modem not working at home, I could only think that something was improperly connected. The woman did mention that she does not have long distance service, but I asked Drexel who said that should not be the cause of her problems. Each class meeting, the time, by and large, when the learners relate their experiences, drives home the reality of the project. It is really unfortunate, to a certain degree, that, up to this point, the project has been mostly about the learners and their reading levels and not about the system and the available courseware. The learners truly appreciate the opportunity and the experience, though.

May, 1993

The class on Tuesday, May 4, began to resolve some of the outstanding administrative issues of CFL's participation in the Power Learning Project, primarily the requirement of a minimum use of the computer. One woman, the one who recently rejoined the class, is a fairly strong reader and has yet to use the system, told the instructor that she will return her computer because she felt she just wasn't going to spend the time with it. Another woman, who lives with extended family, spent the most time on the system in the beginning, and turned in her modem some weeks ago - I was under the impression that she decided to keep it which means I have to locate the fourteenth modem, thought she could keep the computer eventhough she was not using the modem. The instructor informed that that was not the case so that computer will be returned as well. Finally, before I arrived at class, the man who requires someone to assist him in reading the screens told the instructor that he was ready too to return his computer. He cited a lack of time. So, after some three months, the number of users stands at eight. The good news was that the woman who repeatedly stated that "this was the day" for her to access the system actually tried the night before. She complained of some interference in her screen, mainly words appearing over words. We tried the system together and she began by doubling clicking the application icon instead of the "Intelligate" document. That was corrected, though I don't think that was what she was describing because she worked in a lesson. Anyway, the woman maintains she has trouble following directions watched as the two of us worked through the system and then the first woman worked in a lesson. The operation of combining the command key with the first letter of a screen command is still posing a great many problems. Constantly, the women would battle with what to do next, which is a totally different problem, and what keys to use. The learners have the quick reference chart explaining the various commands, and yet, there is something holding them back. I spend a fair amount of time observing the group in the classroom, before we work with the computers, and the same type of questions and problems arise. Relatively simple math operations will be reviewed, for example, and when the classroom instructor asks for the answer to an example - let's say "10 x 12" to demonstrate the rule of multiplying by ten - even after they have performed numerous problems, answers will be thrown out with a near reckless abandon. The instructor's jaw will drop, her eyebrows will furl, and she'll ask how that can possibly be. The response, almost unanimously, is, "It's easy when we do it with you, but when we leave here, we simply forget it." It, of course, is not a matter of physically leaving but separating from the teacher in the most elementary sense. This is precisely the response I receive when reviewing the CYBIS system with the learners. I have to inquire about this.

Thursday, May 6. Unfortunately, and actually some two weeks ago, I learned that the woman who spent so much time on the system in late March and early April has a family emergency and has been unable to use the system. Her father, who lives in New Jersey, had his second stroke and so she needs to attend to him. In-class computer time was dedicated to working with the woman who spent the better part of winter in the hospital. In spite of her long absence, she remains very enthusiastic about participating in the IMSATT project. For this reason, the instructor and I decided to exclude this woman from the 'deadline' on computer use. I worked with her for approximately an hour, and she appeared to enjoy very much it as well as learn a great deal about the system. Working in the basic math lessons, she found the number line a particularly interesting tool for answering addition questions, remarking, "That's really clever." In fact, it was quite enjoyable for me to watch this woman truly appreciating the resource and its potential. More so than most of the other learners in the class, she has appears to have this genuine interest for the computer and the system - whether she will become comfortable enough to use both independently is a question for me. I think one's best guess would be that her skills are not at a level necessary for IMSATT; but after seeing her in action today, I am beginning to rethink that prediction, very happily.

After class, I picked up the computers from the two learners who decided to end their participation in the program.

Tuesday, May 11, had just a handful of learners at class. When I arrived, the man who needs assistance reading the screens told me of some difficulty he encountered. The message on the screen, he copied it for me, read, "File busy or application missing." The learner and the instructor asked me about the possible causes, and I told the learner and then the instructor that in all likelihood it was a matter of "selecting" something other than the "Power Learning" document. After the period of regular classroom instruction, the learner and I worked on he computer and we discovered that when he started, he was not opening the disk. I should have asked him what he did, rather than just have him tell me, "he didn't do that." After we opened the "Power Learning" document everything went smoothly, albeit I had to read most of a given screen's content. He has certainly increased his reading skills, though.

The other part of the computer time was spent with the woman who has been ill during the winter. She came to class with her modem because she said it wasn't working properly: the lights, in her words, "the eyes," weren't working. We used her modem together and it worked fine. An observation: There seems to be an inherent antagonism, almost, between the learner and the computer/system, definitely, and their studies in general. With the computer/system, to use a computer term, there is almost a default set at "something is wrong with the machine" when they come across problems - the instructor often follows this line of thought as well, though I don't know if that is what she thinks or if she is merely trying to be supportive of the learners. It strikes me as completely antithetical to a problem solving process. I see it extend to their studies in general when they have trouble with spelling or with math. The response, more often than not, is an attacking, not inquisitive, "Why is it done that way?"

Thursday, May 13, was the last class before a summer vacation for the instructor. A number of the learners talked about the difficulty they were having with knowing what to do when faced with different situations on the system. One woman recounted how she had no idea that she was supposed to click pictures of items to move them in a math counting lesson. She wanted to be able to ask someone a question. I told her to use the "term ask" feature, but no one in the class is making use of it. When we actually got on the system later in the class, with several other learners watching, I had to assume the role of navigating them through the process of the lesson - when to press "next," when to type a number, when to watch the example. Unequivocally, the single greatest obstacle to more use, excluding personal commitments, is the sorting out of the various messages on the screen. Time and again, learners describe a difficulty subsequently related to missing the system directions. Or, if the procedure for answering a question changes, the learners are essentially paralyzed. For the most part, they will not venture a guess at hitting return.

Tuesday, May 18, was another small class with just five learners attending. It was also my first class as instructor and I was anxious to develop, in conjunction with the class, a broad framework for integrating the various goals of the class, which I see as reading, writing, and math, with the available resources, which I consider are books, periodicals, computers, guest speakers, cultural institutions and the learners themselves. I haven't spent as much time thinking about it as I need, but hopefully, over the next two weeks, we can develop a rhythm - one where expectations are formulated and worked towards. This first class for me was largely a feeling out process and although it wasn't marked by wild celebrations, I felt that expectations were starting to be formed. As for the computer project, hope to identify specific modules at the end of each class that will supplement in class material. Today, one woman, the one who had so many times said she would start using the computer, told me that, "whatever level I had her at on the disk was too difficult and she wanted it changed." I tried explaining to her that it was up to her, really, to choose the course and the level, as far as the most basic ones go. When we worked on the computer later that morning, her troubles were about reading the screens for directions. She had been in the first module of the basic math, I think it is concepts of addition, and she could clearly handle the questions. However, when it came to what she should be doing as far as the system is concerned, she was almost completely lost. She would type answers when they were not asked for and then wonder why the system would not advance, though the system wanted her to do something like press "next." In each situation like this, I try to underscore the importance of finding the capitalized command, usually located at the bottom of the screen.

The MCOL monthly meeting is Thursday and we still have assessment material outstanding. I think it is interesting that a large portion of that outstanding material includes the writing samples I asked the instructor to administer to some five learners. Because the learners had a writing sample earlier, they told the instructor they had already completed the latest one, and she assented. I find this interesting in terms of what one might describe as "the line drawn in the sand" - I've witnessed this with the technology, with the assessment material, and even the regular curriculum. For whatever reason, a perspective has been adopted, a perspective very much defined by the learners. This makes me a little apprehensive, a little wary of "learner driven (learner centered?)" education.

Thursday, May 20, was a day consumed, in large part, by the outstanding assessment material. With just a handful of learners attending class, I was unable to complete that task, and with those who were there, the assessment - in this case the student self-assessment - took the better part of an hour to complete. I had to remain in the classroom with one woman who needed to finish some other assessment tools, but three of the learners decided to go work on the computer. One woman, the woman is one of the strongest readers in the class and has yet to spend much time on the system, had called me the previous day with questions about accessing the network. She told me that whenever she tried to connect, the system would ask her for her password which she would give only to have the system declare it incorrect. Without knowing the exact status of her disk, I assumed that it still had the original "Power Learning" document on it and that was what she was opening. I asked her to look for a newer version of the document, but again - and I should have been uniform with the disks - I was unsure of the precise name. In class on thursday, she told me she was receiving the same message. With the two other learners, she decided to see whether they could figure out the problem while I remained in the classroom. It was great that the learners were determined to have a go of it - from setting-up the system in the Nicetown office, which I normally did, to addressing the one woman's particular question. When I asked whether they wanted me to help set-up the computer, the two woman, one who is a relatively high user of the system, said "yes" while the man who needs assistance reading the screen said he could do it. I was glad that he was confident and that he had the opportunity to demonstrate his expertise. After a half hour or so, the woman with the question returned to gather her things before leaving. She told me the problem was clarified; she was opening the original "Power Learning" document and not the new "Intelligate" document - that was my fault for being inconsistent across the learners' disks. A little while later, the class decided to turn to math and I went upstairs to see whether the two learners wanted to join us. They told me that they would continue to work on the system. Despite the gains made, I was frustrated that after a week of class I hadn't integrated the computer curriculum into the classroom curriculum. I almost feel as though for whatever reason the topic of the "computer" has become identified as a negative issue for the learners. That would certainly be a terrible development, but between the assessment material and the discussions of computer use, the topic has taken on an almost chore like quality. I think, though, that on an individual basis many of the learners still view their relationship to the computer in a positive, educational light. A challenge for me is to redefne the topic in the context of the class and the curriculum.

The week of May 18 included the search for additional learners to join the program. Two longtime CFL learners were asked and both said yes. Both, I might add, are already Macintosh users, though not extensive users. I was scheduled to meet with both of them on Wednesday, May 19, but just one showed. He is in his early sixties, a veteran who spends a good deal of time at the VA hospital and with his church. He has had a remarkable life and is currently meeting with a volunteer tutor twice a week. On that Wednesday, the computer and modem were transferred to the man, and we scheduled a time for early next week to work on the system together at his home.

On Monday, May 24, I spent approximately three hours with the new member of the project. He seemed to pick-up the system very quickly. In addition to acclimating himself to the special commands, he expressed very little, if any, frustration with the layout of the screen. In spite of his relatively strong reading skills, he emphasized that he would work on the system when he regularly met with his tutor so she could assist him with some of the reading. He also explained to me, and reiterated several times, that he had a number of other commitments, especially related to the VA hospital and assisting medical researchers as a subject, so there would be periods when he would be unable to use the system.

Rather than realizing the goal of greater computer involvement in the class, it seems we are heading in the opposite direction this week, May 25. Although three or four learners still use the system one to two hours per week, a general apathy has set in concerning the computers. I assumed the lead of the class just last week and in effort to make the class meetings as meaningful as possible to the learners, I've restrucured or structured the class in response to their comments. Instead of a free-flowing, open-ended format, we've adopted a defined schedule of study with explicit components. The learners have responded very positively to the new schedule, but the effect has been to direct energy toward the format and away from the computers. On Thursday, May 27, a CFL coordinator in West Philadelphia notified me of a learner who would be interested in joining the computer project. Actually, the evening before, at a community party in North Philadelphia, a CFL coordinator introduced me to a woman also interested in participating the project. So, after some six months, it appears as though we will finally have a full group in the project. I scheduled to meet with the learner from West Philadelphia on Tuesday, June 1.

Weeks of June 1 and June 8: I'm not sure what it is and it makes me want to reconsider any and all severe judgements I passed on the previous instructor as far as integrating the computer into the classroom, but I find myself, now in the role of the instructor, avoiding emphasis on outstanding assessment material as well as even how much time is being spent on the computer (See notes at the end of January). I know from a cursory glance at the system records that at least three, maybe four, of the learners are not using their computers at all, or at least, not accessing the system. Two of those learners, in all honesty, probably cannot work on the system without assistance. The other two I have in mind are medium to high level readers in the class and talk often of going home and using the system, but almost never do. Nevertheless, I have invested so much of myself in the success of the class as we've redefined it that I not only fail to allot time to work on the computer, I consciously/subconsciously avoid a wholehearted discussion of the topic because of the tension associated with it. I am not sure if this underlying tension contributed to the first instructor's response, but I find myself experiencing this transformation with assumption of leadership duties in the class. If I had to venture a guess about the forces shaping this tension, I would say two are at work. One, the nature of the class, open-entry/open-exit adult basic education, places the instructor in somewhat of an appeaser role. Not entirely, mind you, but to the extent that one hopes to retain learners, which is not a slight consideration, caution is the preferred strategy. In this situation, it became evident early on that the learners were having difficulty with the system, thus the project, and as a consequence, the project and its attendant components, i.e. assessment, were viewed as unpleasant, eliciting the instructor's reaction. This captures the second probable force at work, namely the learners being overmatched. Because the learners were, by and large, unable to use the system as planned, a certain degree of tension naturally arose. Anyway, from my perspective, this is the prevailing situation in the Nicetown class; now, I have to figure out how to diffuse (?) it.

On Tuesday, June 1, I met with the new learner referred to me by CFL's West Philadelphia coordinator. I was not able to secure an account number for her immediately so when she came for the introduction, we first reviewed ClarisWorks and then briefly looked at the courseware through my account. This woman has previously worked quite a bit with educational software on IBM computers, so she strikes me as being quite confident and excited about using the Mac. Her primary interest sounds as though it is related to assignments her tutor will give her. She hopes to do that work on the computer - ClarisWorks. Hopefully, after she uses the system a few times, she will find that rewarding as well. I've contacted Terry Martell regarding an account number for this woman, but for the time being, her work will be confined to ClarisWorks.

In the meantime, I tried to keep up on how the new man was doing. This was one of the weeks where his volunteer work with the VA hospital was to take him out of town so I called him at the beginning of the week of June 8 to see how things were going but he was not home. In the meantime I tried to secure the new account number for the woman which finally came on Friday, June 11. On Sunday, June 13, the new woman called to find out what was going on a nd we scheduled a time to meet the following day. At the meeting, which preceded her regularly scheduled tutor session, we again quickly reviewed ClarisWorks and IMSATT. Unfortunately, the service was unavailable all day Monday, June 14, and we were unable to get hands-on practice with the system. When I spoke with this woman on the evening of Tuesday, June 16, to tell her the system was up and running, I was pleased to learn later that she accessed the network that evening for approximately one hour.

During the last two weeks, especially, I and several of the learners have encountered difficulties with the system. Namely, either there is an extened lag on the response time, sometimes up to thirty seconds - this happened to me on the mornings of Tuesday, June 9 and Wednesday, June 10, and in the evening of Wednesday, June 16 - or the system completely freezes leaving no other option than to quit the application. Again, this has happened to me as well as to some of the learners.

When I arrived home last night, Wednesday, June 17, I had a message from the new man in West Philadelphia. He had a question about where to find spelling lessons. After I we spoke, I was really encouraged about the prospects of his use of the system.

The Power Learning Project - The Center for Literacy
January - August, 1993

The **Power Learning Project** is an eight month pilot program testing home-based, interactive computer assisted instruction (CAI), or "distance learning," for adult basic education. The City of Philadelphia's Mayor's Commission on Literacy, on behalf of eight community-based adult education programs, is managing the **Power Learning Project**, encompassing 100 adult learners and supported by the National Institute for Literacy, Bell Atlantic and the IMSATT Corporation. IMSATT has a five-year contract with Control Data Corporation to distribute educational software to homes via CDC's mainframe. IMSATT's courseware is the CYBIS system and is a derivative of the PLATO education system.

The Center for Literacy (CFL) will implement the **Power Learning Project** in its class located at the Nicetown Boys' and Girls' Club. All participants in the class are at the adult basic education level, ranging in age from 30 to 65, who have demonstrated their enthusiasm for learning through long and consistent attendance. Twelve students will participate in the project, five men and seven women, and each learner in the class will receive a Macinthosh Plus computer, an external hard drive and a modem for software and courseware use at home.

CFL will begin the project with an orientation period scheduled over six class meetings. During this time, project background, the Macintosh environment, Claris Works and the CYBIS system will be introduced. The material will be presented initially to the entire class after which learners will have the opportunity for hands-on practice. This classroom instruction will be supplemented by a Macintosh user booklet developed by CFL with funding from the Fels Fund. The goal of the orientation is to build a shared and firm foundation for all CFL participants.

The Nicetown class blends whole group instruction with a strong emphasis on individual writing. Within this framework, it is anticipated that the CYBIS system will expand the studying options for individual learners. Accordingly, CFL plans to incorporate CYBIS courseware or material in each class meeting. At the outset, the plan is to focus on reading and to introduce math several weeks later depending on user experiences. This approach allows the project to start without a series of placement tests.

CFL has established guidelines addressing class attendance to insure the continuous use of the equipment. Finally, CFL intends to monitor the program through dialogue journals. Dialogue journals provide a forum where participants can share their experiences and observations. The journals along with the quantitative results should give a good indication of the program's impact.

PLP writeup 4/93

June 1, 1993

Dear CFL Learner:

Thank you for participating in the computer learning project. CFL hopes you find your experience with the Macintosh computer and the software meaningful and enjoyable. In order for the computers to be used at home, CFL needs to sign an agreement with you. The agreement makes certain that CFL and the learner understand the terms of the computer learning project.

The terms of the computer learning project are:

1. The Macintosh computer given to you on June 1, 1993, is the property of the Center for Literacy.
2. You are responsible for general care of the Macintosh computer at your home during the project.
3. The Macintosh computer is to be returned to the Center for Literacy at the end of the project.
4. The Center for Literacy is responsible for any costs related to the project. These costs include telephone charges to call for the software up to 45 hours per month.

* The Philadelphia County Assistance Office will help pay for part of the phone costs if you already receive assistance.

Please check here if you receive County assistance ____ .

5. Class attendance is necessary for the success of the project. If you cannot attend three weeks in a row, CFL will give your computer to another student.

Again, thank you for participating in the project and good luck.

______________________________ CFL

______________________________ Learner

__________________ Date

The Center for Literacy
Questions for the Evaluator/Power Learning Project

Learner Self-Esteem, Motivation Questions:

Pre-Assessment:

1. Do you use a computer now? If so, what do you use it for?
2. Why are you interested in computers?
3. What do you know about computers?
4. How do you think you will use the computer?
5. How do you think learning about the computer will help you?
6. What do you think makes someone good at computers?
7. How do you feel about using the computer? Do you think it will be easy or hard?
8. What will you do when you have problems using the computer?

Post-Assessment:

1. Why are you interested in computers?
2. What do you know about computers?
3. How do you use the computer?
4. How has learning about the computer helped you so far? How might it help you in the future?
5. How do you feel about using the computer? Is it easy or hard?
6. What do you do when you have problems using the computer?

TO: Anita and Rose

FM: John

RE: Power Learning Project

DA: March 18, 1993

Today, I attended the monthly Power Learning Project meeting at MCOL. The most important issue discussed was learner use of the computer and in particular, the CYBIS system. The project is at a point where a minimum amount of time on the system is a concern - with all of the focus early on directed toward the maximum time, the minimum goal of six hours per week, as stated in the agreement, was shortchanged. One of the original CFL documents had as a goal three hours per week. Perhaps, the difference should be split.

Anyway, it may come to pass that quite a few learners do not attain this minimum during the next month. In that case, a contingency plan needs to be in place, i.e., additional learners need to be identified, available, prepared, etc. Two related issues concern the "twelfth learner" and whether CFL plans to end the project June 30, as originally scheduled, or maintain it for six full months of CYBIS use, as originally planned - that would be the beginning of August. The latter is very much an open question for MCOL and the evaluator, though they would prefer an extension.

Let's find a time to discuss these issues:

1. Minimum use of CYBIS
2. The "twelfth learner"
3. CFL's schedule

LSH Women's Program
Power Learning Project

Teacher's Log

Tuesday, January 21, 1993

We began installing computers in participants homes and training them to log on to the CYBIS System at the same time. Although students were trained in advance to use the Macintosh, word processor, etc..., they were unable to learn the log on process to the mainframe because LSH has no open phone line to use for modem access.

We (Meg and I) installed 3 computers on this night and although it was a bit much, everything went pretty smoothly. We began at 6:00 and finished up by 9:30 and were on our way home. The training went smoothly due to a handout which was prepared which spelled out the necessary steps the learner needed to take. However, preparing the handout took approx. 2 1/2 hours of time not covered under the funding for this program.

The only other problem was that the learners had to learn the log-on process using the 1800 number owned by CDC because at this time the proper software from Bell Atlantic was not ready for use. This means that the 3 learners trained this night would have to be partially trained again.

Students expressed confusion on using the modem, they thought they needed to use the modem to use the word processing program and the games. Also, they were confused about the hours they needed to use the CYBIS System (10 a wk.) compared to the use of the word processor (anytime).

Tuesday, January 26, 1993

Students began the testing and evaluation process for the project. However, testing wasn't completed for several weeks due to: lack of time in one meeting with students to complete all the tests; the writing tests (essays) were too difficult; and a need to cancel classes so that computers and modems could be installed in participants homes.

Thursday, January 28, 1993

Students completed the Survey and the Self-Esteem Inventory. Both surveys were too difficult. The study habits survey had too many answer choices: rarely; sometimes; frequently; generally; almost always. My students understood sometimes and almost always, but not the others. On the Self-Esteem survey I had to read and explain at least half of the questions. Example: Question #29: Are you definitely lacking in initiative? Students didn't understand lacking or initiative. This was frustrating for students and took much more time than we had available.

As a result, we were only able to complete one of the writing assignments.

Tuesday, February 2, 1993

Meg installed computers and modems into 4 student's homes during the day. This installation was very difficult for her (environment, installation hassles). She will comment on this in her report.

Meg and I installed 3 more in the evening. This installation was relatively easy except that the new Intellegate3 software was now available. This changed the training and made it more difficult because it now made the handout partially wrong.

Wednesday, February 3, 1993

I was bombarded at work (Drexel) with calls from LSH students. They were having mega problems with the CYBIS software and logging on. I told them to meet me at LSH on Thursday at 11:30 and I would check out their disks.

Thursday, Feb. 4, 1993

Went to LSH today to meet the last 2 students for installation and training. Also met with 2 other students whose disks needed to be recopied. Their system disk was acting up - their keyboard was not giving them the proper letters for the keys they pressed. The installation went well, but I had to do it during Drexel time which was not good. I had to make the time up. I left Drexel at 11:00 am and returned at 3:00.

Friday, Feb. 5, 1993

Have been receiving numerous amount of calls and complaints from student in regards to logging onto CYBIS. Many are having trouble. Several thought they damaged their disks somehow. Everyone has been contacted and told to bring their disks to class on Tuesday and that I would take them home with me and check them out. (at least 10 calls)

As of Thursday, Feb. 4, all students have the computers and modems installed in their homes and have been trained. All students have logged on at least once, and LSH is the first class to register any logon information.

LSH Women's Program
Power Learning Project

Teacher's Log

Monday, Feb. 8, 1993

A student contacted me to tell me the *70 (call block code) was not working on her phone.

Tuesday, Feb. 9, 1993

Students took the last Essay tonight while Meg and I compared notes, checked student disks, and tried to figure a way to use the modem from LSH.

Thursday, February 4, 1993

Arrangements made with MCOL to help LSH distribute the remaining computers fell through. Terry Martell took the initiative to contact one of the students who had a car and asked her for help. The student agreed, but it had to be done during the day. Terry agreed to do it because it was imperative these students get setup and because it was her only alternative. This arrangement, however, interfered with and put a strain on her hours at Drexel for which she had to work overtime to make up. I think it is imperative that it is noted that hand delivering and installing computer and modems into 12 learners homes is very time consuming (something which wasn't given much consideration beforehand). In addition to the installation, students had to be trained on the modem use and logon procedures. Again, doing each student individually took a considerable amount of time. A handout was developed and used during these trainings, but several hands-on sessions as a class in a lab situation would have been much more effective and less time consuming.

Thursday, February 11, 1993 AM

By Tuesday, Feb. 9th, most of the LSH group where experiencing problems and in a panic.

•One student was experiencing system bombs every time she tried to start her computer.

•Another student was in tears because she thought she damaged all her disks and during a counseling session at LSH, expressed to her counselor her fear that we would take the computer away from her. She didn't damage the disks, but she did however make at least 50 empty folders, copies of empty folders, and a copy of copy of empty folders, etc..., (all of which had copies of copies inside them) and tried to open more than the memory allowed. She did this on all of her disks. Finally she

Teacher's Log

got so embedded in these folders she was totally lost and didn't know what to do (trying to look inside these folders to make sure I wasn't trashing anything important made me dizzy!). I can estimate that at least 3 hours of her time was spent just making new folders.

•Yet another student complains that even though her disk's auto-signon was scripted to block incoming calls, her phone still rings while she is online. I have no explanation about this, except I've been told by Drexel phone staff that it is possible she actually has 2 phone lines connected to one phone jack and the *70 only blocks one of the lines.

•The main complaint I received from all the students was that they could get as far as the end of the Bell Atlantic screens and then their screens would stop and nothing would happen. I figured out that you had to type a number 1 and then press the return key to get it to continue. They tried this and still had problems. Upon further investigation I discovered that there are actually several steps to this process that I took for granted: 1) you must wait several seconds for the blinking cursor to appear before typing anything, which they didn't do; 2) once the cursor appears you can then press 1 and return; 3) sometimes the return will not register and you have to press it again. But students were impatient and didn't wait long enough for the return to be accepted and tried to press return 2 or 3 times which interfered with and halted the process.

•Finally, on Tuesday night I decided to collect everyone's disks and take them home with me. At least this way I could try each one as a start-up disk and dial out with it to see what the software problems were. I discovered that at least half of the disks had a WDEF virus on the desktop which could have been the culprit of several of the problems. I worked steadily (3 1/2 hrs.) disinfecting all of the disks (12 students each with 4 disks), starting-up with it again to make sure it worked, and dialing out with it to make sure each learner had logon capability. I also had to check the network access information of each disk to make sure all of the information was correct.

•My experiences with this project have been many. I have been frustrated many time trying to figure out how I'm going to accomplish the many tasks with the students when I only had 5 hours a week with the class as a unit. Especially when we were being pressured by the MCOL to test all the students and install the computers at the same time. Something had to take precedence! Much preparation (2 multipaged handouts and several disk updates) was necessary in addition to the actual execution of the lessons and/or trainings. Our center was one of the lucky ones. We at least had the ability to set all the computers up at once and give several weeks of introduction to the Macintosh and Word Processing trainings. Our major set back was that we didn't have modem capability and couldn't perform these tasks in the lab. However, on Tuesday, February 9, I was able to connect and successfully call out on one Macintosh/modem setup in the lab area. At least now I can ask a learner to show me with her own disk what she does when she logs on and can assess and resolve the problem much more quickly.

Thursday, February 11, 1993 PM

I became very frustrated this evening when I couldn't find any of my students logged on to the system. I was monitoring Damarisol and pressed a shift-stop to quit. All of the sudden she disappeared from my list of active students along with Elsie. I logged off and immediately called the students just to keep getting a busy signal. The few students I did contact were still having trouble. Agnes couldn't even manipulate her windows to find the Intellegate3 document to start the logon process. Norma's "p" key doesn't work.

I kept logging on to see if anyone was signed on, and nothing! And then I would log off and call and get a busy signal. I called Meg and she told me to go to bed!

Tuesday, February 16, 1993

Came into work today and printed a PHILUSE (stats) list of all students in my group and found out that most of my group was indeed signed on Thursday evening. Called and talked to Miriam today and found out why I couldn't see them in the active users display. Student do not show up there once they enter into a lesson. Once they begin working in a lesson they disappear off this screen.

To find out who is actually signed on and working, use the PHILUSERS file. Also, Miriam suggested using the DREXCDSI notes file so that other instructors can read our troubleshooting mail. This would save time sending instructors mail on problems that have been solved.

Cheryl McIntyre called today and asked what keystroke to use for Control. The Mac extended keyboard has a control key, but the small one doesn't. Miriam wasn't sure and said she'd check.

Wednesday, February 17, 1993

I figured out what the key problems were. To make an exponent like 5^9 in CYBIS you have to first type 5, then press Command-U, and then type the 9. It works just like the Superscript Style in MacWrite II. Also, to make the multiplication sign in a problem like 4x4x4, you first press a 4, then press Command-X and it will automatically make the x for you. Keep repeating until you complete the sentence.

Teacher's Log

It will be Command-/ for division.

Thursday, February 18, 1993

This is the first night we're having success! I have 6 students logged on by 7:01. Had a very successful monitoring session with Cheryl McIntyer. She needed to use the Command-X keypress for the multiplication sign. I sent messages to all LSH students to let them know they're doing great. I made phone contact with Lucy, Lillian, Amy and Kathy prior to 6:00. All said they were ready to begin. The only one who actually signed on from those 6 was Lucy. Logged off at 7:30 to call them again. Amy was not home, I left a message. Elsie was not home, I left a message (she contacted me to tell me there was a death in her family and she had been at the hospital.) Contacted Kathy and she was not home. Lillian and Agnes' phones where both busy.

I have decided to ask Cheryl M. to go to Agnes' house, Joyce to go to Lillian's house, and Cheryl T to go to Kathy's house this coming Thursday and help them get on, or to try to figure out why they can't. These pairs where paired according to where people live.

A Drexel student was also on-line and contacted me about a keyboard with a broken space bar.

Tuesday, February 23, 1993

Tonight I asked the student's mentioned in the previous note to pair up this coming Thursday. Everyone agreed. In the meantime, I had Agnes and Kathy practice on-site. I arranged Agnes' disk so that she couldn't move things around or trash anything. I also fixed it so that when she puts in her disk all that shows is the Intelligate3 doc she is supposed to use, she doesn't have to open any windows. Kathy's main problem seems to be her password. I had her log on at LSH and it worked fine. It finally dawned on me that it was probably her keyboard. One of the keys wasn't registering correctly for her password to go through. I suggested she go home and open the ClarisWorks program and type her password. Whatever letter was missing when she was done was the key that was broken.

We also managed to start the fraction curriculum in class tonight.

LSH Women's Program
Power Learning Project

Teacher's Log

Thursday, February 25, 1993

Kathy called me today to report that indeed it was her keyboard. I told her to call Meg at LSH and report it to her and to try to get it down to her so she can return it to MCOL and get another one. Kathy, Amy, and Elsie were the only students not logged on tonight. Kathy didn't have a working keyboard, and she called Cheryl T to let her know not to come to her house. Elsie called to let me know there were 2 deaths in her family this week (one was a suicide) and that she wouldn't be logging on tonight. Amy is another story. I recommended to Meg last week that Amy should be dropped from the program. On Tuesday evening before class, Meg had a talk with her about her "attendance" and such. Sure enough, she didn't log on tonight. She is not the right person for this project. We should get someone to replace her.

Other than that, everything worked pretty good tonight. Joyce went to Lillian's house and got her started, although she didn't stay there long enough to give her a lot of practice. Cheryl M called to say her son was very sick and she couldn't go to Agnes' house. Not only did Agnes log on by herself, she also sent me a pnote to let me know that Cheryl couldn't come. I was very excited about that.

A lot of students are complaining about getting execution errors when they try to enter certain lessons. It won't let them get in, and it won't let them go past. It seems to be happening mostly in the language curriculum, module P. Also, there have been complaints from Lucy and Norma that their screens freeze up and they can't do anything. Norma also reported that it took her over 1 hour just to logon because the system was running extremely slow. I think this has to do with the number of students logged on at the same time. Ben has reported this to Bell and they are looking into it. I spoke to Bernice Brice (Bell Atlantic) who said that she thought that as long as each student had their own intelligate password that the number of people logged on at the same time was unlimited. But, she said just to make sure she wasn't wrong she was going to check on it and get back to me.

Tuesday, March 30, 1993

Things have been going fairly smoothly for a few weeks now. Only very minor problems happening like a student getting the flu and not logging on for a week. Tonight was the first evening in 2 weeks that we have held Tues. evening class. Last week, my son Brian was sick so Meg gave me permission to call students and tell them to stay home and work on CYBIS. The week before last, we had a major snow storm which closed the public schools; therefore, LSH also cancels class. However, the students still logged on to the system.

LSH Women's Program
Power Learning Project

Teacher's Log

March 30 continued...

Tonight I received a few new complaints about the system. Kathy Williams and lucy Colon complained that everytime they choose Math Course from the main menu it takes them directly into the Basic Skills Math, not giving them time to choose GED Math from the menu.

I realized that, with Kathy, she was double-clicking on the main menu selection and the second click was carried to the following menu and resulted in her choosing something she didn't want from the menu. I advised Kathy not to double-click on a menu selection.

With Lucy, however, it was the same problem, but she wasn't double-clicking. She was having trouble with her mouse button sticking which caused the same problem as double-clicking on a menu selection. I advised her to type the letter next to the menu selection to choose it instead of clicking her mouse. This is a temporary solution until we get a new mouse for her.

Both of these students thought that they were entering the GED Math and IT was sending them back to Basic Skills Math! Classes are cancelled next week due to Easter holiday. It will be interesting to see if the students still log on and if so for how long.

Donna Roush

November 22

The first class was arranged simply to lay out the program and get people introduced to the setup. We sat in a circle and chatted for a few minutes, then we used the group process to chose interview questions. We broke into pairs to begin the introduction process. Everyone was quite involved in interviewing their neighbors: matter of fact, I was finished and ready to move on much before anyone else appeared done. There were many hopes expressed during the next step concerning improving employment prospects. I must admit it gives me pause to stand in front of people and pretend to be able to help them make their lives better.

We discussed journal writing and passed out notebooks and paper for everyone to begin their writing.

November 29

Pat took over this class and next week's. She had everyone complete their placement tests.

December 1

This week, Pat had everyone complete an in-class writing experiment with a topic assigned by me (Describe Your Favorite Room). Also, students finished up the testing.

* * * *Christmas Break* * * *

January 4

First day back. Gave out computers only - no software yet,because copies were not available. Took serial numbers and showed them how to put them together.

We had a great time with the homework assignment, which was to write a description of something you could fit in your purse, and bring the item and description to class. We put the items on the table and handed out the descriptions. People worked in teams and found the item, then we discussed at what point they realized what they were looking for. We also made charts showing what methods people used to describe (color, size, use, etc.) It was neat to see that some people wrote complete descriptions using only the use of the item and never described its physical qualities, while others stuck to the real, hard qualities.

I introduce the AIM first level assessment method with its five step diagnosis approach.

Best part of class came during individual conferences to discuss writing (Room). I had written comments about everybody's work, including lots of questions to let them know I was thinking about what they had written. Well, to a woman, they took those questions as implication that they hadn't done well. Pat suggested that I explain again about my evaluation approach and define "dialogue" again. Everyone seemed enthusiastic about classroom participation. We chose a topic for writing: "My Dream Vacation." This seemed influenced by my recent vacation.

January 11

Heater broke. No class.

January 18

Martin Luther King Day. No class.

January 25

Finally, we get together again. Another day given over to testing, but Ben comes and shows me the system while Pat administers the tests. I am taking the Apple home to try the software out over the next two weeks before I show it to the students.

The software seems rather simplistic and just a tad boring, but that could be my reaction to the subject matter. Everyone seems anxious to get some drills down, so this program should satisfy that urge. Learners getting a little disgruntled about the machines. Also, worst news for continuity is that they have to go through ANOTHER battery of tests that the Mayor's Office decided would provide standardized results. While I agree with the principle, I think they should have waited for the next group, because this is a major interruption at this time. So, we work in a little talk about writing in between the tests.

February 1

I insisted on one complete day of teaching to catch us up with where we had been. I introduced the CUBE theory. We constructed the cube, read through the example, and then chose a topic to do orally. After much discussion, we settled on the Inaugaration as a timely matter. We tossed the cube and came up with ARGUE FOR/AGAINST. This topic was particularly well suited to this approach, and we had a lively discussion going about plusses and minuses of the affairs surrounding the Inaugaration. Once again, I was reminded that not everyone will have the same background information available. One learner asked us to stop and explain what an Inaugaration was. I was glad that she felt free to ask.

During topic-choosing discussions for in-class and at-home writing, one student emphatically suggested that we write about men. Everyone seemed agreeable to that. Also, I mentioned that one student was dealing with an illness at home, and that might be a good topic to start collecting their thoughts about.

February 8

Pat sent letter to everyone requesting that they be here for training tonight. All hell breaks lose. I come into class thinking I just have to set the students up with their own copy of this stuff and give them the phone number. WRONG. Turns out I don't have the right software for them, but this doesn't become clear until I have fooled with the damn thing for almost an hour. I am so frustrated for them. They have waited so long for the pieces of this, taken oodles of boring tests, and now I can't get it to work. It feels just like my old job, when I had to install unruly equipment at a customer's office, and they had paid thousands of dollars for it. I feel totally incompetent, I have no idea what people are trying to explain to me over the phone, and generally I am pissed. I send everyone home, disgruntled. Maybe I should have ditched the computer part of class right away tonight when it didn't work, but I was totally unprepared for this experience. I had been working on the thing nonstop for two weeks with very little problem. I really felt like I let them down. I make an appointment with Ben for Thursday night - let's hope that's the end of it.

Thursday - Ben shows me the ropes, and I go home and prepare the disks for everyone.

February 15

I get most people signed in, but computer quits after that and won't let us past the Bell sign-on. I can sense the learner's disgust, and of course I take it personally, whether I want to or not. Once again, computers take over the night, everyone leaves early, muttering and complaining.

The saving grace comes from Cheryl Freedman, who comes to class too late to witness my self-destructing computer act, but wants to review her writing with me. She has written about her experience with an illness - her brother died of AIDS. She has written a lovely tribute, and the best part is, she said, "I had no idea I could write about things like this. It made me feel so good to write it all down."

February 22

Well, just about everyone gets signed on. Suzanne, of course, is experiencing wierd

BEST COPY AVAILABLE

problems with her computer. Probably just to show up my difficulty of dealing with her! Monica has also run into a wall. I want to use the notes to communicate their problems to Ben. Computer keyboard develops difficulty with the letter T. Therefore, I can't sign on. VERY frustrating.

We do a little in-class writing (those people not busy signing on to the computers) and we work with dictionaries at the end of class to check our spelling. I ask Cheryl if she would be willing to share her story next week and she agrees.

March 1

Finally, everyone is signed on. We leave the computers and gather around to talk about writing. Cheryl reads her piece, and everyone seems moved. She also shares a story about her boy who is five and still in the hosiptal, having been a premie. I feel better about the computers, but just as overwhelmed about these women - they all seem to have so much to handle.

March 8

A real class! We do work on spelling, then move to in-class writing. After writing, we use dictionaries to check our spelling and two students read their work: Venus and Cheryl, who is quite outspoken about wanting to read her piece! Venus disses the topic of spring (chosen by consensus) to write mainly about waterskiing, which is her favorite sport.

I was a little taken aback when Michelle started the comments with "You didn't stick to the subject." I want so much for this to be a positive experience for people who choose to read their work out loud. But two people pointed out how Venus used spring as a springboard for her discussion of outdoor sports. Sylvia saves the day by pointing out that Venus APPLIED (a CUBE concept) spring, when we were expecting her to DESCRIBE it. I was so excited that she had made the connection. I must remember to bring the cube into things next week again.

Cheryl wrote about how people are so much nicer in good weather. There wasn't much disagreement with that premise.

The spelling part seemed to bring forth the difficulties of varying degrees of skill, because the good spellers were bored. I will have to think about this.

Suzanne was very negative about handing her work in, and also about her experience with the computer. Pat recommended that I have some personal counseling with her to discuss how she feels about the class and how she can get more out of it. Naturally, I would like to ignore this problem, but I know I can't.

Christina and Carmine and Joan did not come to class, and either did Monica. At least Monica has been doing the computer time. I will have to talk to Pat about this, too.

During the computer instruction time, we learned how to send notes back and forth. That seemed to spark some interest, and I told them I would teach them to talk on-line next week. I cleaned up two problem disks, and now everyone but Christina is formally signed on.

- On Tuesday, I checked the stats and Vanessa and Sylvia had been working away on their machines right after class. I was so relieved for them!

On Wednesday, Shawn sent me a note about enjoying the class, and Vanessa let me know via a note about a problem she was having. PROGRESS! Michelle told me (on the phone) that she was getting the NO DIAL TONE message on her modem. I suggested she take the assembly apart and reconnect it, just in case one of the connections was loose.

March 15

Well, it was a blizzard. No class. This is frustrating.

March 22

Started class with spelling test. Off to a rocky start because people weren't there on time. Reviewed TOPIC SENTENCE with them and discussed what was a good starter and what wasn't. Assigned subject for in-class writing, "What it Means to Have a Computer in my Home."

In spelling test, I could tell that some students had studied, but others totally ignored the task. I'm not sure what to do with these situations.

Topic sentence discussion seemed focused, but not much input from them. I will have to get the classroom time more balanced and include more discussion starters.

Carmine, Christine, Cheryl, and Michelle were missing.

Computer time centered on sending and clearing notes. Also showed Vanessa how to get to the LAB part of the lessons. I really feel I've misguided them somehow - they are not clear on what the computer training offers them.

March 29

Made appointment with Ben to talk to us on-line. What a tremendous response from the group. They loved the novelty of real-time communication, and Ben's silly nature just had them in stitches.

April 5

Foiled by the heating system AGAIN! Gave class an assignment over the computer to write about a person who had made them laugh. I am getting notes regularly from Shawn, Vanessa, and Carol.

April 12

Following our heater-interruptus, I decided to forego computers for the night and concentrate on writing. I broke up into a one-room school house and had people working on all different levels of spelling - making flash cards, testing each other, it seemed to work.

We did a fairly intense Topic Sentence exercise in which they had to judge some sentences and decide whether they were good or not. Then, they had to rewrite the bad ones.

Following this discussion, we used the cube theory to write about LAUGHTER, because they said that writing about someone who made you laugh had been really hard.

We also set up times to try to talk to each other on-line. I was the only one who would take on Suzanne, but this turned out to be a blessing in disguise to me, because I got to see her really trying and making a tremendous effort to get her communications right.

Carol, Vanessa, and Shawn tell me they stayed on for three hours talking to each other. I am amazed at the support and pride they have for each other's efforts.

I sent them their assignment over the computer again. They are to send me a topic sentence.

April 19

Well, I had a revelation. As more and more efforts at Topic Sentences flowed in, it became clear to me that we were confusing Title and Topic Sentence. So we had a good review in class and wnet over and over it until I think most everybody was clear.

And best of all, Suzanne said, "Gee - maybe if I can get this Topic Sentence thing down, I'll be able to organize my thoughts better!" I have been so excited about the strides they are making with their critical thinking.

We learned how to send COMMENTS to the programmers about the lessons. And we all gave Cheryl some pep talks about her need to get on the machine and put in some time. Vanessa was watching her type a note, and she said, "Hey - watch what you are typing - you are leaving out words!" I was glad that she ws reading the screen so carefully.

April 26

Tonight I rearranged the class time so that two different groups went down to the computer by themselves. They were really excited about what they learned from each other. Shawn showed everyone how to look at their status reports and how to clean up their notes (a refresher course). Suzanne showed her spelling-bee partner Vanessa how to get into the spelling lessons on-line. I am truly amazed at how they are looking out for each other now, with very little effort from me to get things started.

May 3

The topic sentence question continues to engage us. Now we are working at adding supporting detail. They worked together to produce an essay on what constitutes a good student. This was there choice of topics, and they got quite involved.

Once again, they split up and went to work on the machine by themselves. I think they get more animated about what they know if I am not hanging over their shoulder.

One of the funniest exchanges came when I admitted that I wasn't planning on taking my camera with me on my upcoming trip. WHAT? they all yelled. They made me admit that my refusal to become comfortable with a camera was silly compared to my insistence that they all become competent on the computer. So, I promised I would come back with two roles of film to share with them.

May 10

I am in Paris. Sharon, another CWEP teacher, is giving a talk on poetry to my class.

May 17

A little jet-lagged, but glad to be here all the same. I got to hear about their petry class. Everyone seemed to like it, even though Carol wrote in her journal that she really didn't like some of the language.

We worked on writing a paragraph about poetry, and Carol came up with a great opening sentence: "The movements the poet made while she read her poems helped me to understand the words more." Everyone came up with some concrete detail, and then we set about making a lcosing sentence. I explained that we wanted to rework the idea of the opening sentence, but not just repeat it. Well, Cheryl said "Her movements were like sign language that made me see what the poem was about." I was so excited! This writing is something I would be excited to claim for my own! These women are truly remarkable.

May 24

My pictures were presented, and I got the stamp of approval, even though I didn't take any with people in them. Last week, Suzanne had just blossomed during the discussion of poetry and she had shared a couple of her own poems with us. This week, the students asked her to repeat

BEST COPY AVAILABLE

them, and I was just so excited to see them reach out to her, because I know she often drove them crazy in the beginning.

Some people will be leaving our group in June, and I will be really sorry to see them go. We are probably getting a few new faces. Carol's daughter joined us, and I had some reall sympathy for Carol having to assume a dual role in the class. It gives me some pause about teaching a family literacy class. There will be some ral different dynamics to contend with.

ATTACHMENT 6:
LEARNER LOGS

Comments from Learner Logs

Notes: These are transcriptions of hand-written responsesfrom the learners in the Power Learning Project. Misspellings and some grammar have not been modified so as to give a completely accurate depiction of the levels of some of the learners.

Marie Smith

I am learning the computer. I am going to conquer the computer.

Mattie Blakeney

I enjoy it and leran from my mistake and when I work on my computer neither(?) matters.

Cheryl Freeman

It started stating my group number was incorrect, also the F-key doesn't work.

Venus Enoch

What I learned. I can use in my class. On all my writing skills. All my sessions that I took on the computer will help me to write better. It also showed me what the author was trying to get across to me. Like what I read and what it was about, the main idea about the topic.

My unusual circumstance was I kept getting the same test over and over. But I found out why. I kept asking the computer to give me the same test. So I took different test one after another. So I could master them. I didn't do too bad.

Venus Enoch

What I learned from my test on the computer will also help me in my class. I learned alot on abbreviations, and how to use er, or, ist, ian. Also in the middle of my test the computer told me to press next, to begin another test, and when I did the comptuer took me back to the Cybis and I had to put my name and codes back on the comptuer. I also wrote a homework assignment on my Claris disk.

Cheryl Torres

Because I tryed but I could not get through. In the middle of a session I was disconnected, the computer went off.

2/1/93 Lillian Metzcher

Try very hard for everything to work, no way. Keep asking for help, try the control-H. (Hardware) Thought it was computer, not keys, same thing next day. Terry says it should not take a long time. Was upset (Software). Still have troubles everthing mess up, like shift, by steps, not fun.

2/3/93 Cheryl Torres

It showed me how to do prime and composite numbers. Yes I did enjoy it. Because I was confused with the keyboard.

2/4/93 Cheryl McIntyre

It was the first time I logged on.

2/4/93 Damarisol Gray

Because it was my first time and it was different even do I got stuck it still was a good experience working on a computer. I was stuck on math about composite and prime. It wouldn't change after I finish my lesson to something else. I wanted to go on but didn't get to.

2/4/93 Damarisol Gray

I did science courses I enjoyed it very much it was exciting to me. I liked that course. I got throw the lesson with no problem and didn't need any help.

2/6/93 Damarisol Gray

Because I logged on at 9:30 pm for social study's it won't change screen got stuck again was very upset turn off computer.

2/8/93 Cheryl Torres

I enjoyed work but at times hit the keyboard and the screen stays. It don't move.

2/10/93 Lillian Metzcher

Still can't do anything. Terry got through somehow, I feel bad taking her time. I can't get it, need to keep trying? Still trouble. I thought I broke it, Terry I call at home upset. Screen freeze very upset. (S) I don't know what it is.

2/11/93 Lillian Metzcher

Because couldn't do anything try try very hard, stop, shut down, read over everything, it's just me. I don't know what I'm doing wrong. It's not fair. Try very hard. Yes try don't know if is computer, or just me, sick, upset. (S) I don't know what it is, me I guess, mad upset

2/12/93 Lillian Metzcher

Keep on for a long time, shut down, read over the papers step by step no luck. Me sick (ony abitter?) I took my time read over, over, don't get it. Don't know why, maybe it's me. (S) Don't know what it is.

2/16/93 Damarisol Gray

Because I worked 3 hours on it and I could continue but it was midnight + was a little tired.

2/17/93 Lillian Metzcher

Because Joyce sheo me, after that I did some myself. My daughter helped me. Joyce came, because Terry asked her to hemp me, she did, it worked ok, it was me. Joyce stay with me, worked on it ok. Her Software work ok.

2/18/93 Harrise Davis

Because it helps me to understand my words a lot more better.

2/18/93 Damarisol Gray

Because I didn't mastered some tests but got through the lessons and learn by doing so. Then I took test again after the lesson and pass the tests.

2/22/93 Linda Fisher

Why I enjoy on my computer is it spelling make me understand mistaes I in spelling and reading and other areas.

2/23/93 Lois Foster

Why I enjoy on my computer is it spelling make me understand mistaes I in spelling and reading and other areas.

2/23/93 Lorenzo Perkins

Why I enjoy it help me work on computer to gete start in my read and write wear I need help in.

2/23/93 Cheryl McIntyre

Because I was frustrated. Because she explained what was going on I had trouble getting the return key to work.

2/24/93 Damarisol Gray

Because I couldn't do the x times sign on exponents I had to stop then later on tryed again.

2/25/93 Chester Burris

I enjoy working with the computer because it helps me a lot.

2/25/93 Pamela Caine

The computer is a joy have in my home. It is a excellant way of learning. We- my children, and my classmates loves the computer.

2/25/93 Cheryl Torres

Because it shows you step by step.

2/25/93 Damarisol Gray

It all screwed up on me. couldn't get it to do what I wanted it to do. So didn't enjoy it at all. Yes, I was dong my lesson, then a term talk came in the picture it was saying hi is Joyce and Lillian but I couldn't get threw to them and everthing got all mixed up, lines upwasrd, so had to quit.

2/25/93 Lillian Metzcher

Having troubles. I didn't get through, don't know. No, then yes was doing pretty good, then frooze. The keys for awhile.

2/25/93 Norma Amil

Once me and Terry tried the new software it did not take me through to the next screen after the one that said welcome back press next. I told Terry and she contacted some people of the program and they solve the problem because after a couple of days it was working very good. I couldn't get to pass a screen where it said welcome back aht then press next but it left me there stuck. Called Terry and we tried a new software over the phone. Where all you do is log on nd it takes you straight through with no problem.

2.26.93 Lillian Metzcher

Very upset Asked for help key but no. Computer was working for awhile, now freeze. Not know.

3/1/93 Damarisol Gray

I kept mastering one after another on language art. I enjoyed I was excited about passing many tests. Was taking test I had mastered it and then came on the screen, "Please report the following to your CLM instructor. There is an error in the data returned from CYBIS. Lesson test 2emtest. Earned score is greater than possible score."

3/2/93 Carol Bielawski

I will use these verbs in my WordPerfict or word processing courses.
I was in the screen Parts of speech. But the screen was not bringing me out to try again, because I did not pass the first lesson. I shut down because I couldn't even change to the next screen. It also would not accept my password so I had to try over and over again. At least three or four times. I also tried to move the cursor and I was receiving symbols that looked like greek.

3/2/93 Lillian Metzcher

For the first time I was ok on the machine, after months trying but I got it. I don't know why? A little bit. Some, but I got it.

3/3/93 Carol Bielawski

I will be able to use what I've learned in writing class, and in letters and notes that I will write in the future.

I got into Cybis and I forgot to tell my son not to use the phone and I had to start over again, My password worked today with no problem. I keep going back and forth to these different screens. 1. See the objects. 2. Choose another module. Module index (key).

3/3/93 Lillian Metzcher

Keep on trying hard times, just shut down and keep on trying. Don't know why. No, yes, keys again? (S) I don't thing so, maybe the keys?

3/4/93 Carol Bielawski

I worked off and on all dy. I finished up to lesson 60.

Today I think things have went a lot smoother. I seemed to figure things out better. I know the last two days were frustrrating to me. I thought there was a problem with the system but I was the problem.

3/4/93 Cheryl McIntyre

My teacher helped me find the right keys. I didn't know how to use the keys to make the symbols on the math assignments.

3/4/93 Lillian Metzcher

Because having trouble again. It was working for awhile, then it freeze, it don't like me. (S) No, I don't think so.

3/10/93 Damarisol Gray

I did very well, I couldn't stop, but had to because it was one in the morning. I was doing chemistry.

3/11/93 Norma Amil

I got through without any problem and worked on math an I learned alot and really enjoyed it. I really enjoyed this program very much.

3/12/93 Lillian Metzcher

Just don't get through. Can't get it. It all died at the (squiggles). I don't know what all this is?

3/13/93 Damarisol Gray

Because I get into Social Study I kept taking same test over and over and it said I mastered but it wouldn't get me out so I signed off.

3/14/93	Venus Enoch I did enjoy all my work session they were successful
3/18/93	unknown Because I am learning grammar and I am beginning to understand it much better. It is all starting to fit together.
3/18/93	Cheryl McIntyre Because there were alot of people hooked up to the computer and it took a very long time for the answers to go through.
3/18/93	Damarisol Gray I was working a couple of hours on the module and the screan got all mistup I couldn't get my lesson back my test, I don't know what happen, it just got all scribblec all over.
3/22/93	unknown I need lots of help will my verb

3/24/93 unknown

I was in one of my courses and I couldn't finish. I quit and tried to go back in but it wouldn't open up the course again. I had to quit and try again, because I hit a key by accident and I got a lot of unfamiliar signs or nonsence on the screen. I tried to go on but it wouldn't accept my command. I went into the personal notes and I couldn't go back to my courses so I had to quit and try again. I have waited for at least 10 minutes and nothing is happening. I wasn't receiving or sending by the modem. So I quit at 9:30 and decided to trv one more time. but I failed.

3/25/93 Cheryl McIntyre

Because I had no problems.

3/25/93 Norma Amil

I was work on the Language Arts on verbs and mastered three modules and I felt so good because I know them and realize that I'm learning something it felt rewarding

3/29/93 Unknown

On the article test, I made an error. It took me to the assignment drill. It got real slow. It took me to the drill without errors.

3/29/93 Vanessa Burnett

Yes, it was very helpful to me and my work that I am doing in class.

3/31/93 Carol Bielawski

I got through my lesson without problems today. The only problem was getting the system to accept my password. I had to make 5 attempts.

4/1/93 Lillian Metzcher

I thought today I could get it, but no. Worked for hours, shut down a lot of times. Its me can get it, need to keep on trying.

4/6/93 Lillian Metzcher

Because I got some work done, I was glad. Got something done.

4/8/93 Monica Cooney

I was the captain of a starship, however, my crew did not like my opinions. I did feel that my answers were correct, or as I stated my best opinion.

4/13/93 Vanessa Burnett

I said yes but it was not enjoying, pronouns are hard to remember that they take the place of a noun. I just ddn't

---

4/13/93 Lillian Metzcher

Hard times. For awhile, keep at it. It worked, no stop.

4/14/93 Carol Bielawski

I enjoyed sending "p"notes and I also enjoyed being paged. I was starting into a lesson when I was paged.

4/15/93 Norma Amil

I logged on and it didn't work because it took me to the main menu would select a course and it would take me back to the main menu, it was very frustrating when you really want to work on the program.

4/18/93 Suzanne ward

Each time I work on the computer I learn something new.

4/19/93 Vanessa Burnett

It was o.k. not mush that I want to talk about

4/20/93 Cheryl Freeman

For the simple fact I wasn't able to use my password. I was able to reach my teacher late that evening and discuss why I wasn't able to get any work done.

4/21/93 Shawn LaGore

It's a fun way to learn.

4/23/93 Suzanne Ward

The spelling lessons are really helping me a great deal. The lessons are great!

4/25/93 Norma Amil

I played the games of the program and I found some of the games very educational and interesting like the restaurant game and other one's.

4/27/93 Suzanne Ward

I always look forward to the next lesson. I do not have no problem

4/27/93 Norma Amil

I was stuck on one module but I was determined to pass this module went through all the study assignments and finally mastered it.

4/29/93 Carni Dismith

to John When I get in its no trouble, and I have a lot of fun in the program.

4/29/93 Chester Burris

Because it very interesting.

4/29/93 Harrise Davis

Because it was very easy to understand

4/29/93 Linda Fisher

The computer is a part of my family now and we are using it together. Sometimes it helps me learn a little better. Please do not take the computer until I have time to work with the telephone.

4/29/93 Lois Foster

It halp me very will went I an at hom

4/29/93 Lorenzo Perkins

Because I feel as though I need to understand more

4/30/93 Cheryl Freeman

My keyboard gets stuck. Also the letter C doesn't show up. Yes, I will get another keyboard.

4/30/93 Lillian Metzcher

Having fun on typing for awhile, went on to toher things, hae fun with that, can't remember what, but fun.

5/1/93 Michele Byrd

The computer system is to slow. I'm use to working at a faster speed.

5/5/93 Damarisol Gray

Because for the first time I send my first pnote. And it was a lot of fun. I send 3 notes to people. I enjoyed. I also worked on math.

5/6/93 Carrie A. Nesmith

I like working on the computer. I learn a lot. I do have trouble staying in different subjects. It is a great way to learn at home

---

5/6/93 Linda Fisher

Have trouble put my sefl down and work on the telephome line. I will force my sefl to work on it more. I love work when I get through

---

5/6/93 Lois Foster

The machine help me a

5/6/93 Lorenzo Perkins

I need more help

5/10/93 Lillian Metzcher
Couldn't get through.

5/11/93 Lillian Metzcher
Had some trouble, it freexe again. Couldn't get any help, sick mad it's me.

5/13/93 Carni Dismith
My computer works fine; just trying to find time for it.

5/13/93 Chester Burris
It was very interest

5/13/93 Linda Fisher
I in joy work on the computer went I getting start

5/13/93 Lois Foster

I learned more

5/13/93 Lorenzo Perkins

Because I want to learn more.

5/13/93 Mamie Smith

Because I did not have a table to work on at the time. Anita gave me a table, but it was too big to go in the space in my bedroom.

5/13/93 Mattie Blakeney

Sometime I get in to a program and get stuck and I don't no how to get out. I all so in joy work on computor.

5/13/93 Cheryl Torres

Because it seem to get stuck constantly makes me made. Yes after shutting it off and start again. I'll do the problems and it seems to stick and don't move. I have to shut it off to start again.

5/13/93 Damarisol Gray

Until a point when it doesn't move me to another question it gets me mad. Then it says no testing. I got to go through the whole thing again. I was taking my test. I waited for it to go to the next question and it would move for nothing. I waited and waited and still, so I hit return and it took me off my test and said I didn't mastered. The test was easy. Synonyms and anton. I was doing fine until it stays in the same place.

5/13/93 Damarisol Gray

Went threw some testes and lessons but some did get me made because the lines and then it doesn't want to change screams I have to quit all the time. Yes I was doing a game after I finish my class assignments for Thursday night and it wouldn't budge it made lines across my screean then I push "Shift-Command" but nothing, so I had to quit. I wish that would stop!

5/13/93 Lillian Metzcher

Couldn't do anything. Keeps going back to main menu.

5/13/93 Lillian Metzcher

Didn't get through. When I work on it keep going to main menu.

5/14/93 Lillian Metzcher

The typing was fun. I enjoy it. After three days I got on this month. I call Terry at work today, I guess she fix it.

5/16/93 Mattie Blakeney

I enjoy working on the computer. I begin to unstan it better.

5/22/93 Damarisol Gray

My kids were playing games they enjoyed it very much, that they were arguing who was going to play next. They loved the computer.

ATTACHMENT 7:
ELECTRONIC COMMUNICATIONS

Drexel ← → CDSI Notes
Note #4 (Exponents)

Successful communication is very important to this project.

2/17/93 12:18 pm terry / phiadmin

To Instructors: In the GED Math Curriculum, exponents are covered under Basic Number Ideas. To write a number in exponential form it is explained to the student to use the CONTROL+ command. The Mac standard keyboard has no control key, and even if it did it wouldn't work anyway. The Mac equivalent for control+ is COMMAND-U. To write the number 5^9 you would first type the 5, then press command-u, and then type the 9. Thank you, Terry Martell

Date: 2/3/93 **Time:** 3:10 p.m. **Name:** Donna
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

What do we do when we do not think a lesson is working right? I don't think the "Strange Verb" lesson in Language Arts is doing what it's supposed to.

Date: 2/4/93 **Time:** 5:03 p.m. **Name:** Miriam Hecksel
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hello, How are you? Chris discovered that the lesson =philuse was not trapping allof the usage information. He knew for example, that new students were on yesterday yet their records did not show up in =philuse. We are speculating that some of the students are simply shutting off their computers (or modems) while inthe actual courseware instead of backing out to the menu and signing ut fromthere. Chris has modified the code to account for "unusual" log-offs. You might want to instruct the instrucors to teach the students how to properly sign off. If this record-collecting problem continues, Chris will have tofind another solution. BTW, do you have a copy of th eformal evaluationdesign that I could see? And,it would be fun to know which centers correspond to which groups (phi00000-phi00008). Thanks again, Miriam

---

Date: 2/4/93 **Time:** 7:05 p.m. **Name:** Terry
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi Benji, I know you're away, but I have just spend some time monitoring the term-talking with one of my students. It was fun and she really enjoyed it. This is going to be fun. Hope the conference was good and you had fun and learned a lot and you found 10 people to present at our conference. Got to go.

Date: 2/5/93 **Time:** 8:21 p.m. **Name:** Donna
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Ben, what the heck is an ANS key on the Apple? I was doing okay 'til it asked for that! Also, do you know anyone else using the IBM software? I have been having some strange experiences with that. Thanks again for making the trip to Kensington.

Date: 2/9/93 **Time:** 8:52 p.m. **Name:** Donna
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, the "Strange Verbs" lesson is under language lessons/basic skills/grammar on the PHI00009 menu. I think maybe it's a timing issue when you have to choose 3 of the verbs from a group of five, but it just would not accept some of the eright answers. It took me 5 tries to pass ... what a blow to my ego! We are devoting next Monday to communications intro for the learners. Everyone is excited. I'm developing some directions for them. Wish us luck. Who is Nat? He says he's going to visit us.

Date: 2/11/93 **Time:** 5:47 p.m. **Name:** Mcintyrec
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Terry,
I want to move on but I don't know how. cheryl m

Date: 2/17/93 **Time:** 9:26 p.m. **Name:** Torresc
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Hello Terry, Todays date 2-17-93 it is about 9:45 p.m.
I was doing algebra did the first test great, but the second test I did not pass so it was going to give me the assignment but the computer screen said there is a problem this is what it said, an execution error has occurred in lesson 0bac101 unit start, please report the following to your clm instructor if you could try to answer me please
Sincerely Cheryl Torres

Date: 2/17/93 **Time:** 1:45 p.m. **Name:** Mcintyrec
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

-----notes from lesson: plmrx curriculum = 0bslang
module p, course 1,
is not verified for assignments.
—

Date: 2/17/93 **Time:** 1:43 p.m.
Type: ○ General ○ System ● Courseware
Comment:

Name: Icintyrec
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS

-----notes from lesson: plmrx curriculum = 0bslang
module p, course 1,
is not verified for assignments

Date: 2/17/93 **Time:** 1:14 p.m.
Type: ○ General ○ System ● Courseware
Comment:

Name: Mcintyrec
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS

-----notes from lesson: plmrx curriculum = 0bslang
module p, course 1,
is not verified for assignments.

Date: 2/17/93 **Time:** 1:13 p.m.
Type: ○ General ○ System ● Courseware
Comment:

Name: Mcintyrec
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS

-----notes from lesson: plmrx curriculum = 0bslang
module p, course 1,
is not verified for assignments.

Date: 2/17/93 **Time:** 1:12 p.m.
Type: ○ General ○ System ● Courseware
Comment:

Name: Mcintyrec
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS

-----notes from lesson: plmrouter curriculum = 0bslang

module p, course 1, is not verified for testing.

Date: 2/18/93 **Time:** 4:24 p.m. **Name:** Miriam Hecksel
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Terry, I forwarded your note regarding the execution error to Bob Hubel. I will send you a status report as to when this will be fixed. Regarding your other problem with the system freezing up, it sounds like line hits (communications problem). I would have Ben call the guy at Bell Atlantic. I will also ask Hubel if he has any input.

Date: 2/23/93 **Time:** 10:31 **Name:** Donna
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

So Ben, this time the langauge skills gives me an error message to report: In 2zsmtest, the earned score is greater than the possible score. Forgive me, can't remember who I am supposed to report these to. So you are stuck with it, and I will keep trying to get to the next module!

Date: 2/23/93 **Time:** 8:03 p.m. **Name:** Pedro
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

```
-----notes from lesson:  execerr
*** Execution error in lesson '0bac101' ***
In unit ieu line 10 regular (pre-arrow)
Last Command was calc
Bad index:  horizontal segment out of range.
Value was -1.  (octal: 077777777777777777776)
Join sequence - start 0
---
```

Date: 2/24/93 **Time:** 8:02 **Name:** Oooneym
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

```
-----notes from lesson:  plmrouter curriculum = 0bslang
module p, course 1, is not verified for testing.
---
```

Date: 2/25/93 **Time:** 9:18 p.m.
Type: ○ General ○ System ● Courseware
Comment:

Name: Turnercj
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS

-----notes from lesson: execerr
*** Execution error in lesson 'obac101' ***
Last Command was calc
Bad index: horizontal segment out of range.
Join sequence - start 0
I'm unable to continue my lesson. I need help

Date: 2/25/93 **Time:** 9:29 p.m.
Type: ○ General ○ System ● Courseware
Comment:

Name: Donna
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ○ Learner ● Teacher ○ Support ○ CYBIS

-----notes from lesson: plmrouter curriculum = 0bslang
module p, course 1, is not verified for testing.

Date: 2/25/93 **Time:** 9:14 p.m.
Type: ○ General ○ System ● Courseware
Comment:

Name: Turnerc
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS

-----notes from lesson: execerr
*** Execution error in lesson '0bac101' ***
In unit ieu line 10 regular (pre-arrow)
Last Command was calc
Bad index: horizontal segment out of range.
Value was -1. (octal: o77777777777777777776)
Join sequence - start 0
I can't find the ctrl key

Date: 2/25/93 **Time:** 9:34 p.m.
Type: ○ General ○ System ● Courseware
Comment:

Name: Donna
To: ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, we have a problem in module P of the basic grammar lessons. When you try to take the test, it says "curriculum=0bslang. module p, course 1, is not verified for testing. I have a student ready to move on but we're stuck. Can I come to Arizona, too?

Date: 2/25/93 **Time:** 9:34 p.m.
Type: ○ General ○ System ● Courseware
Comment:

Name: Donna
To: ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, we have a problem in module P of the basic grammar lessons. When you try to take the test, it says "curriulum=obslang. Module p, course 1, is not verified for testing. I have a student ready to move on but we're stuck.

Date: 2/26/93 **Time:** 9:07 p.m.
Type: ○ General ○ System ● Courseware
Comment:

Name: Donna
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ○ Learner ● Teacher ○ Support ○ CYBIS

-----notes from lesson: plmrouter curriculum = 0bslang
module p, course 1 is not verified for testing.
—

Date: 2/26/93 **Time:** 6:24 p.m.
Type: ○ General ○ System ● Courseware
Comment:

Name: Mcsorleyj
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS

lots of trouble finding verb explanation and also system extra slow and also trouble getting to next section after verbs in grammar part.
mcsorleyj

Date: 2/27/93 **Time:** 3:18 a.m.
Type: ○ General ○ System ● Courseware
Comment:

Name: Oooneym
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS

-----notes from lesson: plmrouter curriculum = 0bslang
module p, course 1, is not verified for testing.
—

Date: 3/4/93 **Time:** 4:33 p.m. **Name:** Mosorleyj
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

Trouble on Grammar-Strange verbs-every time take mastery test, 1st test fine but second test either question or fourth question stays blank - when you give up and hit next, it takes you out of test and says you did not master it - this happened twice, then made us take a drill before tying test again, took drill, then took mastery test AGAIN, and same thing happened on fourth question of second test!!!!! Can't move on to another moduel in Grammar since it says didn't master previous one!!!! This is mosorleyj of group phi00003. Bye

---

Date: 3/10/93 **Time:** 5:21 p.m. **Name:** Donna
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ● Teacher ○ Support ○ CYBIS
Comment:

And furthermore...
I have just been working in group phi00009 on the basic language (grammar) again. After being forced by module v to take the lab, I get to module x and it does the same thing: You are working along, taking the test, when suddenly nothing appears in the boxes, but the system tells you to press NEXT to continue. When you press NEXT, it tells you that you didn't pass and you'll have to do the lesson again.
Any suggestions?
These are the situations that upset the learners because they think they've done something wrong.

Date: 3/10/93 **Time:** 5:21 p.m. **Name:** Donna
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ● Teacher ○ Support ○ CYBIS
Comment:

And furthermore... I have just been working in group phi00009 on the basic language (grammar) again. After being forced by module v to take the lab, I get to module x and it does the same thing: You are working along, taking the test, when suddenly nothing appears in the boxes, but the system tells you to press NEXT to continue. When you press NEXT, it tells you that you didn't pass and you'll have to do the lesson again. Any suggestions/ These are the situations that upset the learners because they think they've done something wrong.

Date: 3/16/93 **Time:** 6:06 p.m. **Name:** Holderp
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

```
------notes from lesson:  execerr
***Execution error in lesson '0bac101'***
In unit ieu line 10 regular (pre-arrow)
Last command was  calc
Bad index:  horizontal segment out or range.
Value was -1.  (octal: o77777777777777777776)
Join sequence - start 0
```

Date: 3/25/93 **Time:** 2:02 p.m. **Name:** Mcintyrec
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

notes from lesson: plmrouter
curriculum = 2gedmath unit: modlist

Cannot get past module c. Have mastered all tests. Terry will try to get me moved on.

Date: 3/31/93 **Time:** 9:59 p.m. **Name:** Fieldsc
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Miller, n.
What's up girl
I've beenpracticing for the test in the math area. I've mastered the basic module1. It was pretty fun, so each night I'll practice another module. I had a ball this afternoon. We should do it again real soon. Well I gotta go Justin is getting very cranky. Write back real soon
P.S. I'm really gonna miss this computer when it's gone. But I'm sure we'll keep in touch with one another. See ya in class tomorrow. Coulete, Peace

---

Date: 4/9/93 **Time:** 7:18 p.m. **Name:** Mcsorleyj
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Mcsorleyj/ phi00003 / cdc 0-3 has a question

Mcsorleyj from phi00003 - the key after "a" and before "c" is not working - what can we do?

Date: 4/19/93 **Time:** 7:30 p.m. **Name:** Donna
Type: ○ General ○ System ● Courseware **To:** ● Learner ○ Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

notes from lesson: plmtest
curriculum - obslang
module - 0lang25, iu -, question -

Just demonstrating COMMENT for learners

Date: 4/22/93 **Time:** 6:55 p.m. **Name:** Terry
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ○ Teacher ● Support ○ CYBIS
Comment:

Hi Miriam,
First let me tell you that I forwarded your pnote about hotel information to Ben because I think he would know more about that than me. There is a hotel right down the street from us on Chestnut Street, but I have no idea what one it is. I also don't drive and never go to the airport. Ben was definitely a better source of info.
Just wanted to let you know that another student had the lesson sending her back to the menu problem tonight. I didn't want to wait so I tried to fix hers and amiln's problem. I exempted them fro mseveral modules hoping that would fix it. I don't know if it did. Also, grayd was in phigmaaa, course 2, module B. The arrow was still pointing to module B even though it said she had mastered it so I exempted her from it. I hope I didn't screw anything up, but they were all trying to log on tonight and I needed to at least try to help.
Thanks, Terry.

Date: 4/29/93 **Time:** 8:52 a.m. **Name:** Miriam Hecksel
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ○ Teacher ● Support ○ CYBIS
Comment:

Terry, below is Elaine's explanation of why your student got "stuck" in High School Skills math. It is possible to change the Variable Management Strategy (VMS) to delete the requirement to take a reinforcement lesson. What is your wish?
*elaine keller /coserv /cdc 4/28/93 2:25 p.m.
This is a case of the old "module mastery lesson." The module works as designed. After you "master" it (by answering enough questions right), you must complete the module reinforcement lesson before you are allowed to proceed to the next module.

Also, we are looking into the problems with Language Arts. We have identified the problem but I am not sure how long it will take to fix it. Chris Hopkins is looking at his menu to determine why learners are getting "stuck" in a loop. I will keep you posted. M.

Date: 5/6/93 **Time:** 7:40 p.m. **Name:** Mcsorleyj
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

Mcsorleyj - a long time ago I left a note saying that the tutorial for the very first grammar item - what is a verb - is NOT a tutorial at all, but a drill - I am having tremendous trouble with verbs and it is messing me up in later courses because it all leads back to verbs/predicates, etc. so I am going back to grammar section to re-study verbs, except the MOST IMPORTANT ONE - the tutorial for WHATT IS A VERB is still a DRILL !!!! Jack McSorley

---

Date: 5/11/93 **Time:** 8:30 p.m. **Name:** Legares
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

-----notes from lesson: plmreturn
curriculum = 0bslang module = +
The computer will not let me finish the module test on Unusual Plurals.

Date: 5/13/93 **Time:** 12:48 **Name:** Legares
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

-----notes from lesson: plmreturn curriculum = 0bslang module = ;
The computer will not let me complete the synonyms and antonyms module test.

Date: 5/14/93 **Time:** 2:38 p.m. **Name:** Jay
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

I have briefly reviewed the usage data available for phi00001 through phi00008. I think I need your assistance in interpreting the data. It would seem that there are no students using the system--just instructors. This may be because all students have been signed on as instructors. Please advise.

Also, how should I interpret the Days, Hours and Sessions data under Usage Avx"Eges. Is it Average # Days/User since anyone has first used the system? Average # of Sessions/User since the first use of the system? If these are correct interpretations, it would seem that system usage has been quite low. Please call me at 516-226-9530 to discuss. Thanks. Jay

---

Date: 5/19/93 **Time:** 9:52 p.m. **Name:** Legares
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

lesson: inb13c10 unit: notebook site: network 0-1
Computer always slow down in the middle of a lesson

Date: 5/24/93 **Time:** 6:51 p.m. **Name:** Donna
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben - Us again. Where the heck is the ARROW keys on the Apple keyboard? Sorry. Donnaxxxxxxxxxx

Date: 6/2/93 **Time:** 7:16 p.m. **Name:** Mcsorleyj
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Another note from Mcsorleyj - 6/2 8:00 Jack got through tutorial for Envelopes finally but when doing test it came up blank for a question and took us out and acted like we didn't pass test so only think. Jack can do is drill but he tried 4 times to do drill and each time it comes up blank and freezes!!! So he can't do drill and it won't let him take another test until he does drill, so he is stopped in his tracks!!!!! I think remember name of person who left us nice note - Dorothy??? We need help. Bye.

Date: 6/2/93 **Time:** 4:44 p.m. **Name:** Dave Runte
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Well, I understand this now.
The "Is the Word In This Sentence a VERB?" is the title of the section.
Without a question, though, it looks really dumb.

Date: 6/2/93 **Time:** 4:35 p.m. **Name:** Dave
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

lesson: 0mbgm1a1 unit: loop site: network 0-7
I'm in the first module (a) and this is the first question in the test.
"Is the Word in This Sentence a VERB?"
Hell, there's no sentence! (And this is my second time doing this - with the same result.)
Something is wrong here...
And why are the words "Wor$,) This, and Sentence" capitalized above? That isn't correct.
This needs to be fixed. Dave Runte

Date: 6/3/93 **Time:** 8:06 p.m. **Name:** Mcsorleyj
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

mcsorleyj again 6/3 - major problems even in math - took us out of tutorial and said data to continue - this is too crazy, we are getting

Date: 6/3/93 **Time:** 7:38 p.m. **Name:** Mcsorleyj
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

mcsorleyj 6/3 is made jack do drill - but drill keeps coming up with boxes for yes or no but blank questions and freezes up! Two nights in a row this happened - ykoest yhet yet jack...
to another module module until drill done, so he has to give up on Grammar!!!!! Help! Help! Help! Please

---

Date: 6/3/93 **Time:** 8:07 **Name:** Mcsorleyj
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Mcsorleyj /phi00003/cdc 0-2 has a question
Part 2 of mcsorley - hard to leave note since keeps crashing - can someone let us know when system is okay again, because we can't go on working like this. Thanks.

Date: 6/4/93 **Time:** 7:19 p.m. **Name:** McSorleyj
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

6/4/ Mcsorleyj to Elaine or Dorothy - thanks for notes still can't do drill for envelopes (return addresses) and won't let us do test or progress to next module until drill done, so we're going back to math. Thanks.

Date: 6/6/93 **Time:** 2:32 p.m. **Name:** Mcsorleyj
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Mcsorleyj 6/6 nte 2 - we also tried the drill for d) Letters of application and it is exactly the same problem - every answer comes up wrong even though we are sure it is correct, especially the obvious ones! This module was programmed poorly and now once again we can't get past this module in order to do rest (and we've been mainly trying to get to (3) filling out applications and we just can't get there !!! We will goback to math now. Can someone leave us a note please sowe will know when we can try test again for letter of appl.??? Thanks.

BEST COPY AVAILABLE

Date: 6/6/93 **Time:** 2:20 p.m. **Name:** Mcsorleyj00003
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

McSorleyj-6/6/-thanks for fixing drill for envelopes - we finally got past that, but now having major problem with test for d. Letter of App. - every answer comes up WRONG even when we are positively SURE of answer - if one of you do tesvrou will see what we mean. It is impossible to n6/6/93get any right !!! so we may be stuck again.

Date: 6/6/93 **Time:** 8:18 a.m. **Name:** Bielawskic
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

Notes from lesson: plmreturn
Curriculum -0bslang module -=5
I get to one of the last questions and there is no question just boxes for your choice. When I push next because it is not moving on, it brings up the mastery screen which states that I have not passed. Although, where there are questions, I have passed.

Date: 6/7/93 **Time:** 5:49 p.m. **Name:** Donna
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ● Teacher ○ Support ○ CYBIS
Comment:

Ben, the arrow keys were for a Cybis lesson, but our TERM COMMENT finally got some results (after 2 tries) and they put in an alternate. Thanks.xxxxxxxxxx

---

Date: 6/7/93 **Time:** 6:05 p.m. **Name:** Words
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

Notes from lesson: plmrouter
Curriculum =0bslang unit modlist

This module (j) is not recording the test completion. Please help. Thanks.

Date: 6/8/93 **Time:** 11:42
Type: ○ General ○ System ● Courseware
Name: Dave
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

Notes from lesson: plmrouter
curriculum =0bslang unit= modlist

After failing two questions in a row in Module B, the variables were shown at the top of the screen. I was able to get a hard copy of this if anyone's interested.

Dave Runte

Date: 6/9/93 **Time:** 1:43 p.m.
Type: ○ General ○ System ● Courseware
Name: Dave
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

Notes fromlesson: plmrx
unit=oneassin, curric=0bslang, module=0lang2, camein-0 lr#2

Hmmm... I flunked the test but I've got a checkmark for completing my study assignment (which was a Cybis lesson). Somehow, that doesn't seem right.

Date: 6/9/93 **Time:** 11:40
Type: ○ General ○ System ● Courseware
Name: Dave
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

Notes from lesson: plmrouter
curriculum -0bslang unit=module
I've reported this problem a long time ago... (see notesfiles =dmrlangn).
There is overwriting on this screen.
Here's what I have done so far: 1.) I took the test for Module A and passed it. 2.) I took the test for Module B and failed it twice.
I think it won't let me test again so I decided to look at Module C. As I've reported this overwriting before, I highly doubt that this is related to my failing the test, although stranger things have happened. (At the question, "What do you want to do now?" option 1.) "See the objectives" is what's being written on the bottom line of the "box" on this screen.)

Date: 6/10/93 **Time:** 8:45 p.m.
Type: ○ General ○ System ● Courseware
Name: words00008
To: ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

Notes from lesson: execerr
***Execution error in lesson 'clmjump' ***
In unit returnline 2 regular (pre-arrow)
Last Command was calc
Bad index: horizontal segment out of range.
Value was 0. (octal: 00000000000000000000)
I can't seem to get past j molgel

Date: 6/10/93 **Time:** 7:15 p.m. **Name:** Mosorleyj
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

MCsorleyj note 2 6/10-MAJOR problem in math-division a. test - each optionthat should have a division sign instead has a PLUS sign!!!! If this is like that all the way through division course, it will be impossible to pick correct answers!!!

Date: 6/11/93 **Time:** 10:35 **Name:** Dave Runte
Type: ○ General ○ System ● Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

I checked the CLM questions and they do have division signs. Per Terri/phiadmin, this is a known problem that surfaces with Macs and their handling of fonts and charsets.
So the courseware is working correctly.

Date: **Time:** **Name:** Terry
Type: ● General ○ System ○ Courseware **To:** ○ Learner ● Teacher ○ Support ○ CYBIS
From: ○ Learner ○ Teacher ● Support ○ CYBIS
Comment:

Scot and John,
Just talked to Donna, she is aware of problem and she and Ben are working on it. Also, just found out that the compuserve number is also only limited to a 2 week usage, even for administrators and it isn't clear to me when that 2 weeks began. So if you have trouble logging on with the number you know why.
Please be patient, I'll let you know what's happening ASAP. Thanks, Terry.

Date: 1/7/93 **Time:** 2:47 p.m. **Name:** Ludo
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ● Teacher ○ Support ○ CYBIS
Comment:

Hi Ben, I read your note, which tells you that I was able to get on the system and play with it. Ludo

Date: 1/11/93 **Time:** 2:06 p.m. **Name:** Gail
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Thank you for your assistance. I've chosen another password. Welcome back to the states, ole mate. We are looking forward to your visit. Take care.

Date: 1/26/93 **Time:** 9:57 p.m. **Name:** Terry
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi Benji, Sorry I didn't get your call last night. I was logged on the CYBIS trying to figure out how to fix the log on file. I fixed it, it still takes forever to get in, but it works and I want to give you a copy of it.
I will NOT be using it at home, I will continue to use the 1800 number because it is faster. I don't think CDC will care much, but I'll ask.
In the meantime, I think we should make an effort to get someone here to look at the file and get it to work faster. The problem isn't just that it takes 3 hours to log on, but once the learner is in, it takes about 10 seconds for the system to recognize a keyboard command which slows the process to an agonizing halt. Student's will get frustrated!! and won't use it!!!

Date: 2/15/93 **Time:** 9:10 a.m. **Name:** Miriam Hecksel
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Ben, Good morning; how are you? Well, I have noticed activity in groups phi0002 and phi0006. Some students have been spending alot time in the courses; very exciting. I was curious as to which center was matched up with which group. I am speculating that 0002 is the Indo-Chinese American Council and the 0006 is th eLutheran Settlement House. It would be nice to know who is who. Thanks, Ben. How is life otherwise?

Date: 2/15/93 **Time:** 6:53 p.m. **Name:** Fred
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

This Thursday is the third Thursday in February. Will there be a meeting as announced at the last one we had at Drexel?

Date: 2/16/93 **Time:** 8:15 a.m. **Name:** John
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Able to connect from CFL Headquarters using th enew start-up disk by erasing the *7.0 prefix. All is well, or so it seems, in Gotham. John.

P.S. Really hope to the learners up and running by th eend of the week. It's only January 1, right?

Date: 2/23/93 **Time:** 10:07 **Name:** Miriam Hecksel
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Ben, I need your help today in preparing my next paper for my Evaluation course. Your help today will aid me in understanding the project better, as well.
1) What would be the general purpose and the specific purpose of an evaluation of this project?
2) Who would be (or is) the primary audience for an evaluation of this project? Who are the secondary audiences for the evaluatiion? I see the Mayor's Commission being the primary audience and Drexel, the instructors, IMSATT, and Control Data as being secondary audiences. Do you agree?
3) What do you think are the concerns of the audiences listed above as far as an evaluation is concerned? (i.e., Mayor's Commission - That this pilot demonstrates a significant increase in literacy skills to justisfy funding.)
Thanks, Ben for your help; I know this is a lot of stuff.

Date: 2/23/93 **Time:** 11:04 **Name:** Miriam Hecksel
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Thanks Ben
Your information is VERY helpful! You are a sweetie. Was Bob Hubel able to help you today? I hope so. Take care of yourself. I got an A on my first paper, thanks to all of the great info you sent me back in October. I will send you a final copy. See ya!

Date: 2/24/93 **Time:** 9:11 a.m. **Name:** Miriam Hecksel
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Ben,
One more question for you regarding this Literacy Project. In your opinion, if you were doing an evaluation of this project, what would be possible constraints? For example, are there certain political situations, adversarial relationships, etc., that could hindrance an effective evlaluation? Looking forward t ohearing from you. (My paper is due tonight - GRIN.)
Thanks a million!

Date: 2/24/93 **Time:** 9:11 a.m. **Name:** Miriam Hecksel
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Ben, One more question for you regarding this Literacy Project. In your opinion, if you were doing an evaluation of this project, what would be possible constraints? For example, are there certain political situations, adversarial relationships, etc., that could hindrance an effective evaluation? Looking forward to hearing from you. (My paper is due tonight - GRIN.) Thanks a million!

Date: 2/26/93 **Time:** 2:22 p.m. **Name:** Donna
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, my student "legares" is having no luck with her password (31 attempts). It is luvme according to her. I tried to change it using my manual, but I have "inspect only" rights to her file. As usual, HELP, HELP. Do you get tired of hearing from me?

Date: 3/18/93 **Time:** 6:32 a.m. **Name:** John
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben:
I bounced the idea of asking some learners to join the 3/18 MCOL meeting off Rose, and there is some concern shared by both of us, that the learners might end up in an awkward position. That is, they may end up feeling that they are at fault somehow for not making "better" use of the system, at least in this setting.
I will, however, try to bring some concrete observations from the learners.
OKJ!?
See ya later, Jon

Date: 3/24/93 **Time:** 3:39 p.m. **Name:** Fieldsc
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Narcy,
I put in my two hours today and decided to drop you a line or two. I also wanted to remind you to prepare yourself for GED test registration this Saturday. Give me a call whenyou get this message. See ya. Coulete

Date: 3/31/93 **Time:** 11:17 **Name:** Johnsonm
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Notes from lesson 0nbr1231 This student needs help using the key.

Date: 3/31/93 **Time:** 10:43 **Name:** Ludo
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben,
Hi my name is Vickie Moody, I have been enjoying the programs being sent through the computer. We are at Perkins Morris Shelter.
Vickie

Date: 4/3/93 **Time:** 7:08 p.m. **Name:** McSorleyj
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Is Cybis going to be unavailable tonight or tomorrow? Does a notice stating such still come up? Can you note what time it will be going down if it is?

Date: 4/6/93 **Time:** 11:05 **Name:** Ludo
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Hi Ben,
I am Diane. I am at red sheild working with Ludo. This computer stuff is very interesting. Diane

Date: 4/6/93 **Time:** 7:51 **Name:** Nat Kannan
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi Ben, I have run into a small problem. it has to do with the use of the 800 number for CYBIS. It costs $12 per hour and some of your instructors are using it extensively. I understand the frustration with Bell Atlantic lines but we can't afford to pay $12 a hour. Please complain to Bob Huntsberger or Ann Greer to increase the speed of the bandwidth. The internet works fine and I think it is the Bell Intelligate that has problems. You can of course use the 800 number on occasions to test for a few minutes. I am sorry about this. If I had the money I would gladly subsidize a cause such as ours. We will soon be on a nationwide network which will alsobe available in Philadelphia. I will give you a test account. It is more expensive than Bell (about the same as Am Inline or Genie) but a lot faster and easier to access. I am working on a way for your students to go directly to Interne from your local Freenet. You might talk to U PENn about this and they might help us Telnet to CDC system with out any connect time costs. I hope things are progressing.

Date: 4/6/93 **Time:** 7:07 **Name:** Terry
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi Ben, There was a screw-up with the package that you left for LeQuyen today. Here, Chad sawit and when he saw your name on the reversed side he took it down thinking someone left it for you. When LeQuyen came, Chad wasn't around. We did lookin your office, which is where Chad put it, but I didn't think the one I saw was it because it had a label on it with your name and address. I didn't look on the back--which is where her name was. Anyway she was gone when Chad came back. I called her and left here a message, but she never called me back. Sorry, I thought it was stolen because several people remembered seeing it yesterday at 5:30-6:00 but not at all today.

PS: I met with 6 drexel students today about the IMSATT program. 3 of the PM group were very excited when they left today so we may get lucky and get these students motivated. The AM group is a pain in the ass.

Date: 4/9/93 **Time:** 10:01 **Name:** Ludo
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Hi Ben, We are here at Eliza Shirley. We are Barbara, Helen, Mary, Cynthia, Locauntis, Ted and Ludo. This is our first time on the computer. What about them Phillies? This is a lot of fun. Ludo is an excellent teacher. If he can teach us he can teach anybody! Ted is right about that Ludo is an excellent teacher we are having fun learning about computers. Hi Ben,
This is Locauntis I don't feel very well, but I am here. I am Barbara I am fine too. This class is ok and I am enjoying it. May name is Cynthia Ben and I am having a good time on the Macintosh. Ben have a good day and if you get this message before 12:00, give us a call!xxxx

---

Date: 4/14/93 **Time:** 5:44 p.m. **Name:** Pedro
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Hey Burenstein,
It's alive, the monster is alive. This message comes to you via the intelligage (aka snailagate) screen.

Date: 4/15/93 **Time:** 9:18 a.m. **Name:** Miriam Hecksel
Type: ● General ○ System ○ Courseware
To: ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ○ Teacher ● Support ○ CYBIS
Comment:

Ben, So, it looks like Pedro is on and that is good? But I caught the jab at Intelligate. Yes, it is slow. And I know you have communicated that to Nat which is the best thing to do.
So, how is life? It is F***** snowing here today. I can't believe it.
Have a good day. Miriamxxxx

Date: 4/19/93 **Time:** 9:29 p.m. **Name:** Fieldsc
Type: ● General ○ System ○ Courseware
To: ● Learner ○ Teacher ○ Support ○ CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

Miller, N.
I'm just finishing my lesson so I decided to write. How are you? I got your message on my answering machine. I've hardly had the time to pick up the phone so I thought I'd drop you a line or two. I miss going to class but such is life. We must go on right. Well I'd better go now. I'll see you soon hopefully.
P.S. Remember the VET!
Co-Co
Peace!

Date: 4/21/93 **Time:** 1:12 p.m. **Name:** Lebrong
Type: ● General ○ System ○ Courseware
To: ○ Learner ● Teacher ○ Support ○ CYBIS
From: ● Learner ○ Teacher ○ Support ○ CYBIS
Comment:

To my instructor,
ya yo termine el primer curso do ingles, me puede decir que yo voy hacer ahora.

Date: 4/27/93 **Time:** 1:40 p.m. **Name:** Donna
Type: ● General ○ System ○ Courseware
To: ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ● Teacher ○ Support ○ CYBIS
Comment:

Ben, CWEP's nominee for the Wilson Goode award is Cheryl Freeman. When Cheryl started at CWEP in 1990 she was part of the elf-Sufficiency program and was living at a shelter for homeless women. She took an introductory computer class and was "So urprised - I thought you had to go to college or be a doctor or lawyer to run a computer." Then, she learned to use computers in her daily life - she got a bank account and used her MAC card, and she got a job as a receptionist and used a computerized phone system. ventually, she was promoted and learned to use the computer for data entry. Now she has he own home and was so excited to have her wn computer at home. She said she used to think she would never be anything, and now she has the confidence to try many new ings. She said from her Power Learning course she has gained the knowledge to write about her own experiences and to value what she has learned.

BEST COPY AVAILABLE

Date: 5/6/93 **Time:** 1:55 p.m. **Name:** Gwup
Type: ● General ○ System ○ Courseware **To:** ● Learner ○ Teacher ○ Support ○ CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Hi Phuoc,
How are you doing? Are you working hard with the computer? Don't laugh. Keep working hard. See you soon.
Bye
Ping

Date: 5/7/93 **Time:** 9:14 p.m. **Name:** Pedro
Type: ● General ○ System ○ Courseware **To:** ● Learner ○ Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

An enemy I had, whose face I stoutly, even resolutely, strove to know. I saw his shadow everywhere I went. For hard he dogged my steps unseen, wherever I did go. My plans he balked, my aims he foiled, he blocked my onward way. Nay he would say, when for some lofty goal I toiled away. One night I seized and held him fast (by the neck) Gotcha you son-a-bitch, I said, as I tore his veil away. I looked upon his face at last, and lo -- MYSELF I saw.
Yes I'll make the 3.5 copy. I can drop it off Monday evening or you can pick it up Tuesday. Give me a call.

Date: 5/18/93 **Time:** **Name:** Terry
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hello Miriam:
When Jan found out that with your help we were able to pull all of that information together she was flabbergasted and enternally grateful.
Thank you very, very much for your generous help and know that it is greatly appreciated!!
Your friend,
Terry

Date: 5/20/93 **Time:** 10:19 **Name:** Amiln
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

lesson: 2zgedm2f unit probs2 site: netowrk 0 - 6

I'm having trouble answering a math problem from module 3, please help me.

Date: 5/24/93 **Time:** 6:25 p.m. **Name:** Donna
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Hi Ben. We are going to continue at CWEP until Aug. 15. We would like to come down to Drexel one night at the end of June. Sorry about the misspelled words. My brain was left at the airport. I changed a student from Torrest to Chybinskij. Do I need to do anything other than change her name? Should I have checked my manual before I bothered you? Donnaxxxxx

---

Date: 5/24/93 **Time:** 6:46 p.m. **Name:** Bielawskic
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

lesson: inbl4b5 unit 5b site network 0 - 4

Where is the arrow key on the Apple for this zapper?

Date: 5/27/93 **Time:** 10:45 **Name:** Bielawskic
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

lesson: inbl4b5 unit: data site: network 0-3

There is a problem with the zapstick it won't move. Do not have extended keyboard.

Date: 5/27/93 **Time:** 6:34 p.m. **Name:** Mcsorleyj
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

In tutorial "commas" keeps suddenly takingus out to DATA TOO CONTINUE WORKING and out of tutorial ! ! ! Mcsorleyj

---

Date: 6/3/93 **Time:** 8:06 p.m. **Name:** Mcsorleyj
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Mcsorleyj /phi00003/ cdc 0-2 has a question
Mcsorleyj again 6/3 - major problems even in math - took us out of tutorialand said data to continue - this is too crazy, we are getting

---

Date: 6/3/93 **Time:** 7:38 p.m. **Name:** Mcsorleyj
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Mcsorleyj /phi00003/ cdc 0-2 has a question
Mcsorleyj 6/3 made jack do drill - but drill keeps coming up with boxes for yes or no but blank question and freezes up! Two nights in a row this happened -

Help! Help! Help! Please

Date: 6/6/93 **Time:** 8:26 p.m. **Name:** Pedro
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Herr Burenstein, I have a volunteer from UPENN working with me and the imsatt. Since Jennifer is not using her signon, can the volunteer be added to the Phiadmin and 00009 groups. If it ca~be done' I'll be very appreciative. Her name is Agnes Malaret (agnesm)
As always Best regards: Pedroxxxxxxxxxxxxxxxxx

Date: 6/11/93 **Time:** 8:24 p.m. **Name:** Gonzalezm
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

me gustaria volver a empezar de nuevo; ya que es muy interes ante el programa por el cual me gustaria seguir estudiar (

Date: 5/28/93 **Time:** 6:58 p.m. **Name:** Mcsorleyj
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Mcsorleyj 00003/ phibsgaa/ cdc 0-3 has a question

Mcsorleyj - doing the same thing as last night: in middle of tutorials, cybis goes back to DATTCONTGIN DATA TO CONTINUE and you have to start tutorial again. Does anyone really read these notes? The same things keep happening and no one answers me.

Date: 6/2/93 **Time:** 6:27 p.m. **Name:** Mcsorleyj
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Mcsorleyj - 6/2/93 having same problems again that someone left me a note saying that they read my note and thanked me (I don't remember her name), in middle of tutorial or test cybis out to Data TO CONTINUE or SHIFT stop. I will keep trying. Bye

---

Date: 6/2/93 **Time:** 4:44 p.m. **Name:** Dave Runte
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Well, I understand this now.

The "Is the Word In This Sentence a VERB?" is the title of the section.
Without a question, though, it looks really dumb.

Date: 6/2/93 **Time:** 4:35 p.m. **Name:** Dave
Type: ● General ○ System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

I'm in the first module (a) and this is the first question in the test.
"Is the Word in This sentenace a VERB?"
Hell, there's no sentence! (And this is my second time doing this - with the same result.) Something is wrong here... And why are the words" Wor, This, and Sentence" capatalized above? That isn't correct.
This needs to be fixed.
Dave Runte

Date: **Time:** **Name:** Terry

Type: ○ General ● System ○ Courseware

To: ○ Learner ○ Teacher ● Support ○ CYBIS

From: ○ Learner ○ Teacher ● Support ○ CYBIS

Comment:

Hi Benji,

I took the modem that Chris gave me home last night and hooked it up. I still had trouble getting into Drexel with it, but I also tried it with intelligate. It might be my imagination, but I could have sworn I got through the intelligate system much more quickly than ever before. I tried it several times, and each time seemed quick to me.

Now this could be coincidence - or just because there weren't a lot of users last night, but as of right now I'm investigating the idea that the Zoom modem may not be up to par with the job. What's you opinion? Terry

---

Date: 1/12/93 **Time:** 12:54 **Name:** Terry

Type: ○ General ● System ○ Courseware

To: ○ Learner ○ Teacher ● Support ○ CYBIS

From: ○ Learner ○ Teacher ● Support ○ CYBIS

Comment:

Ben, Just wanted tolet you know that I went through all of the instructor records and changed many of the options that each of the instructors had. The main reasons I did this are: 1)Miriam asked that you and/or I be the only ones who edit record, add students, and delete things. 2) Some of the instructors had the ability to delete and destroy information and I thought that was dangerous. You and I have access to all options. When adding instructors to phiadmin, DO NOT press DATA togive them the same access as you. Because of their experience (and common sense) I allowed the following instructors tohave the same options as us: Fred, John, Ludo, and Scot. This way we have backup if we need it. I don't think they know that they have all of these options and we shouldn't tell them until they need to know. Also, who are Nick and Rosa?? They are listed as instructors in phiadmin.-- Terry.

Date: 2/1/93 **Time:** 9:14 a.m. **Name:** Chris Hopkins

Type: ○ General ● System ○ Courseware

To: ○ Learner ○ Teacher ○ Support ○ CYBIS

From: ○ Learner ○ Teacher ● Support ○ CYBIS

Comment:

I had to back on that approach because CLM was over-writing those variables. I have converted the code to attach a nameset and store th einfor per PIRMARY signon instead of each student signon. The date, time, usage, AND course group are now stored and displayed. Because I now use a nameset, I canhold 32 entries instead of 7. However, you now must access the data by the PRIMARY signon is "chris/phi00000". All the student data is collected under th eprimary signon.

Date: 2/3/93 **Time:** 12:37 **Name:** Terry

Type: ○ General ● System ○ Courseware

To: ○ Learner ○ Teacher ● Support ○ CYBIS

From: ○ Learner ○ Teacher ● Support ○ CYBIS

Comment:

Miriam, You are more than welcome to sign on and watch my students work on the system. If you would like to monitor, just let me know so I can tell them who you are.

I will send you a copy of the lesson plan. It is done on a weekly so it is not prepared for the whole duration of th eproject. But it also includes th elessons in which the students learned computer skills to prepare them to use the Mac in their homes. I thought perhaps you could use it to compare to other methods being used.

I'll keep you posted, andplease relate tothe many others at cdc who have been a big help to us that we greatly appreciate the work that was done and it is now paying off.

BEST COPY AVAILABLE

Date: **Time:** **Name:** Terry
Type: ○ General ● System ○ Courseware **To:** ○ Learner ● Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi John,
Great news, I have the intelligate number for "grantj" who I am also registering in your group as soon as I send you this note.
The number is 124651. Sorry it took so long, she just got back to me today.
Good Luck! Terry

Date: **Time:** **Name:** Terry
Type: ○ General ● System ○ Courseware **To:** ○ Learner ● Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi Sam,
Sorry it has taken so long for you to get the number for Tam Le, Bell Atlantic said they never received my first fax on May 24 and I had to resend it on June 3. She just called me today wit hthe numbe which is 412224.
I have a question about your two other new students. Are they new students replacing students who have dropped from your group? Or are they 2 additional students joining the program?
Please let me know, as we may not have to get new numbers, but reassign old numbers of dropped students.
Thanks, Terry

Date: **Time:** **Name:** Terry
Type: ○ General ● System ○ Courseware **To:** ○ Learner ● Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi Again,
Just wanted to let you know that when I was entering grantj into the system today I realized that I entered youngj incorrectly. What I had to do to correct my error was erase his current record to enter him the right way.
This may cause the following to happen: 1) he may have to start from the beginning on any lessons he has already done, 2) If he was having trouble getting on, he will now be able to.
I hope this doesn't cause any problems for you or him, it's possible he will have to do some lessons over, but I wanted to make sure that his usage was being recorded correctly and had to make the change. Thanks, Terry

---

Date: **Time:** **Name:** Terry
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi Miriam,
How are you? I hope you're well. Spoke to my students and they said to say hi. I'm having a problem and really need your feedback. My student, colon1 (Lucy), is getting nothing but garbage when we try to log on from her house. I visited her house and 1) tried existing set up 2) hooked up a new modem, 3) made her a new disk and a new start up file, 4) logged on as her from LSH and from my home and it works fine 5) and gave he a new Gateway password for the Bell network. Nothing has worked!!
Can you give me an ideas as to what to do next? She can't access the system at all. From the time she sees the connect 2400 on the screen it is nothing but garbage.
Help, Help, Help... Thanks, Terry

Date: 2/9/93 **Time:** 6:10 p.m. **Name:** Ben
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Thanks for contacting me. Cornelius' password is now abolished. You can send me a note on the Cybis system if you want to, I log on kind of compulsively, 3 or 4 times per day. See ya, Ben.

Date: 2/9/93 **Time:** 6:36 p.m. **Name:** John
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Hi Ben, Have been trying to access the system - many times - using the learners' disks to see ahead of time what they might experience. Unfortunately, each time I try, I receive the message, "you call cannot go through, please try again later."
Well... I've tried later - over a four hour period today and I'm still not getting through. Should I just keep trying?
Signed, Hopelessly Disconnected
(John, CFL - I feel like I'm writing to an advice column)

Date: 2/12/93 **Time:** 8:56 p.m. **Name:** Ludo
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, once again I am tryingto use IMSATT but using it through th enew disk the line was busy. Does that mean that there are too many people on the line,or is this a system error? Anyway, I tried it the good old way, like us people from th eold world like to do, and voila, it worked.
I am feeling a little frustrated withthe recent turn of events with the computers, but I will talk to Donna and to Jan to try to see if we canfix this problem. Probably for now it is wisest to see if we could get three additional disk drives so that learners don't have flip-flop with their disks. Ok, I'm gonna leave it at that. Time to explore few more options on this wonderfuly controlled system. Sayonara

---

Date: 2/16/93 **Time:** 3:37 p.m. **Name:** Terry
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi, I spoke to Miriam today and she said that: when a student enters a lesson, his/her name is NO LONGER listed on the active student screen. To see a list of current users we have to use the philuseR command to see who is logged on. We use the philuse command to see their stats. Also, she said we should start using the notes file DREXCDSI to send messages of problems and/or troubleshooting correspondance because other instructors can read it. I haven't tried it yet so I don't know id I knew how to use it, but she said it's in the loose leaf book. That's it.

BEST COPY AVAILABLE

Date: 2/17/93 **Time:** 9:31 a.m. **Name:** Miriam Hecksel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ○ Teacher ● Support ○ CYBIS
Comment:

Hello Ben, How are you? I encouraged Terry to use the notesfile = drexcdsi from now on for correspondence. This way, others canwrite comments, etc. So go read it, I have started a note.

Date: 2/17/93 **Time:** 7:57 p.m. **Name:** Pedro
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ● Teacher ○ Support ○ CYBIS
Comment:

Have gotten your notes but have problems adjustingtothe system. I expect the leaners to run into same problems. My bad experiences might be good for them... Could not a access "drexodsi". Termtalk is (Shift f2) I sign in around 9:00 p.m. during the week and 7:00 p.m. on thursdays.
Pedro

Date: 2/17/93 **Time:** 11:38 **Name:** Chris Hopkins
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ● Teacher ○ Support ○ CYBIS
Comment:

Hi Miriam, I have added two new groups to the project: phi00010 -- class code is 10 and phifam -- class code is 99. I have modified the r9uter to set the class code as outlined when students use these groups and go into CLM courseware. I have added these groups to the "philly" account, and have grouped the codewords "phiadmin" so the folks at drexel can edit them. I set phi 00010' as a new pilot group, and phifam' for non-pilot activity. Everything should be set and ready to go. Chris.

Date: 2/22/93 **Time:** 11:31 **Name:** Miriam Hecksel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ○ Teacher ● Support ○ CYBIS
Comment:

Hi, Ben
Sorry that I have not responded to your note about why the statistics look different. I will call you about this. Keep in mind that the students are in phi0000_ for only a short time before they go into a course. =philuse should somewhat match the amount of time they were in a specific curriculum such as =phigmaaa. Does this help; I will check into this and call you today.
P.S. Pedro term-talked me today; he did not remember that he needed to use a completely different signon (phi00009) his password so I am going to clear it for him. Have a great day. -M

Date: 2/22/93 **Time:** 8:37 a.m. **Name:** Ben
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

I'm puzzled about what you mean when you say you removed 70, "fromline 3." What do youmean? Call me or come visit and we'll figure it out. And, or couse, we need to discuss what's going to happen Wednesday when we work with the people from SLN. Have any of them had Mac experience before? What do we want toconcentrte on, word-processing or Imsatt? Talk to you soon. Ben

---

Date: 2/23/93 **Time:** 11:04 **Name:** Miriam Hecksel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Thanks Ben
Your information is VERY helpful! You are a sweetie. Was Bob Hubel able to help you today? I hope so. Take care of yourself. I got an A on my first paper, thank to all of the great info you sent me back in October. I will send you a final copy.
See ya!

Date: 2/23/93 **Time:** 10:54 **Name:** Donna
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Have a great time. My new motto for life is HELP IS AVAILABLE. I will still be trying to master basic grammar skills when you get back. But I will still see you Thursday if that is okay.

Date: 2/23/93 **Time:** 10:57 **Name:** Dave Runt
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

I assume this is taken care of ...
Looks like he forgot his p/w.
s0sysmsg/cdc 2/23/93 2:38 p.m.
-----notes from lesson: plato
Possible security breach --
signon = williamsk/phi00002
tries at password = 25
station = 0-4, nam port tb1b001
Please notify the group director.

Date: 2/22/93 **Time:** 7:55 p.m. **Name:** Donna
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, Ben, Ben.... I copied the disks, we put in the student numbers, the first two people logged on, and then every time we tried it after that it gets as far as typing in that damn 1 and return and says its connected and then it says TRYING 129.179.62.5 and it just sits there forever. I have HAD IT! WHAT IS WRONG NOW? And, you wouldn't beleive the trouble I am having typing this note. The system keeps freezing. My home number is 572-1633. HHHEEELLLPPP!

Date: 2/22/93 **Time:** 12:46 **Name:** Terry
Type: ○ General ● System ○ Courseware **To:** ○ Learner ● Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Instructors: The process of monitoring and term-talking a learner who is in a lesson is as follows:

1. Type = philusers= at the What Lesson? > prompt.
2. Find the learner on the current user list shown.
3. Make a note of the group name next to the learners name. This is the lesson that the learner is currently doing.
4. Press Shift-Stop to return to main menu.
5. Type the new group name at the What Lesson? > prompt.
6. Choose selection 2 (Roster) from the menu.
7. Choose selection F (see who is Running) from the menu.
8. Choose either 1 to talk to the learner or 3 to monitor the learner.

Date: 2/22/93 **Time:** 11:31 **Name:** Miriam Hecksel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi Ben,
Sorry that I have not responded to your note about why the statistics look different. I will call you about this. Keep in mind that the students are in phi0000_ for only a short time before they go into a course. =philuse should somewhat match the amount of time they were in a specific curriculum such as = phigmaaa. Does this help; I will check into this and call you today.
P.S. Pedro term-talked me today; he did not remember that he needed to use a completely different signon (phi00009) to see the courseware. I helped him with this; he forgot his password so I am going to clear it for him. Have a great day. - M

Date: 2/22/93 **Time:** 7:55 p.m. **Name:** Donna
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, Ben, Ben... I copied the disks, we put in the student numbers, the first two people logged on, and then every time we tried it after that it gets as far as typing in that damn 1 and return and says its connected and then it says TRYING 129.179.62.5 and it just sits there forever. I have HAD IT! WHAT IS WRONG NOW? And, you wouldn't beleive the trouble I am having typing this note. The system keeps freezing. My home number is 572-1633.

Date: 2/23/93 **Time:** 10:57 **Name:** Dave Runte
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

I assume this is taken care of... Looks like he forgot is p/w.

Date: 2/24/93 **Time:** 7:51 p.m. **Name:** Terry
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi Ben, I tried the new script and there were a few gliches. First of all, it ran really slow because of all those carriage returns and pauses in the prompts. It also was giving an INVALID USER NUMBER message.
I played around with it a little, took out some of the pauses and returns, and added a few of my own ideas an not only does it work, but now the autosignon works too.
Once you're on, it still runs a little sluggish, but at least the logon process is better. I must have connected and disconnected a hundred times! Anyway, I made sure that I was working from a floppy disk, using the same system as my students. I seem to work fine now. Although, an 800 number would still be better for all concerned. I'm calling this new document Intelligate5. Let's give everyone the same system and the same CYBIS document. Keep it consistent. Terry

---

Date: 2/24/93 **Time:** 7:51 p.m. **Name:** Terry
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi Ben, I tried the new script and there were a few gliches. First of all, it ranreally slow because of all those carriage returns and pauses in the prompts. It also was giving an INVALID USER NUMBER message. I played around with it a little, took out some of the pauses and returns, and added a few of my own ideas and not only does it work, but now the auto sign-on works too. Once you're on, it still runs a little sluggish, but at least the logon process is better. I must have connected and disconnected a hundred times! Anyway, I made sure that I was working from a floppy disk, using the same system as my students. I seems to work fine now. Although, an 800 number would still be better for all concerned. I 'm calling this new document Intellligate5. Let's give everyone the same system and the same Cybis document. Keep it consistent. Terry.

Date: 2/25/93 **Time:** 1:49 p.m. **Name:** Sam
Type: ○ General ● System ○ Courseware **To:** ● Learner ○ Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

I read your note today. I try to use a student's disk at my home and it works.
This is just to test if I can write a note to you.
See you later.
Sam

BEST COPY AVAILABLE

Date: 2/25/93 **Time:** 1:49 p.m. **Name:** Sam
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

I read your note today. I try to use a student's disk at my home and it works. This is just a test if I can write a note to you. See you later. Sam

---

Date: 2/26/93 **Time:** 2:22 p.m. **Name:** Donna
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, my student "legares" is having no luck with her password (31 attempts). It is luvme according to her. I tried to change it using my manual, but I have "inspect only" rights to her file. As usual, HELP, HELP. Do you get tired of hearing from me?

Date: 2/26/93 **Time:** 2:22 p.m. **Name:** Donna
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, my student "legares" is having no luck with her password (31 attempts) It is luvme according to her. I tried to change it using my manual, but I have "inspect only" rights to her file. As usual, HELP, HELP. Do you get tired of hearing from me?

Date: 2/26/93 **Time:** 2:22 p.m. **Name:** Donna
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, my student "legares" is having no luck with her password (31 attempts) It is luvme according to her I tried to change it using my manual, but I have "inspect only" rights to her file. As usual, Help, Help. Do you get tired of hearing from me?

Date: 3/1/93 **Time:** 11:04 **Name:** Ben
Type: ○ General ● System ○ Courseware **To:** ○ Learner ● Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

I am sending you a fax with this same information, but here's this. It may be that some of the characters are control signals, and mess up the communication. There are carets( ), asterisks (*), number signs (#), and m's. I'm not sure, but I think the carets indicate that a message is coming, number signs indicate delays to make the system wait (sometimes intelligate demands a pause before entering something, and # creates this delay), m's indicate carriage returns, and I'm not sure about th easterisks. However, I think some of the waits and so on may be different from the mac version, because each computer will run at a different speed (sigh). If you log on one step at a time, you will notice that the network prompts you with statements like "Enter your choice below:" or "Input your user id and press ENER." It is these messages that the computer is responding to. The changes from the old signon are both in changed prompts (formerly "below, below, below, ENTER, ENTER," now "below, below, below, ENTER, following") and in waits.

Date: 3/4/93 **Time:** 3:23 p.m. **Name:** Donna
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Dear Terry,
This thing is damn slow!

Date: 3/4/93 **Time:** 3:23 p.m. **Name:** Donna
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Dear Terry,
This thing is damn slow!

Date: 3/8/93 **Time:** 11:15 **Name:** Pedro
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Bob, Terry of grp. phiadmin gave me a diskette that has script files in it. Among which, there is a file called intgate.sor. I believe that this is the file my learners need to access the system. I will proceed on that assumption and install it, in addition I will replace the access a make the changes in config files as per the instructions the readme file. Le me know if I should proceed differently.

Date: 3/8/93 **Time:** 10:54 **Name:** Burnettv
Type: ○ General ● System ○ Courseware **To:** ○ Learner ● Teacher ○ Support ○ CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

To Donna
My computer stopped in the middle of the lesson. Why I was doing a good job and a wried message went right through the lesson. Somebody doesn't want me to work on this computer. Why me and why now.
From Vanessa Burnett By now and see you on Monday

Date: 3/8/93 **Time:** 11:15 **Name:** Pedro
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Bob, Terry of grp. phiadmin game me a diskette that has script files in it. Among which, there is a file called intgate.sor. I believe that this is the file my learners need to access the system. I will proceed on that assumption and installed it, in addition I will replace the access a make the changes in config. files as per the instructions of the readme file. Let me know if I should proceed differently.

Date: 3/9/93 **Time:** 11:25 **Name:** Donna
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben - Are you back? I couldn't remember the date, so I am sending this to you and Terry. Our keyboards are possessed. We

---

Date: 3/9/93 **Time:** 11:40 **Name:** Bob Hubel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, Are you back? I couldn't remember the date, so I am sending this to you and Terry. Our keyboards are possessed. We

---

Date: 3/10/93 **Time:** 11:40 **Name:** Bob Hubel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

(Ben, this is what I sent to Pedro:)
As I mentioned to you on the phone, the script on the dis used to work fine with Intelligate BEFORE they changed their signon pages. After we discovered their change, we then issued a FAX to Ben with a new Intelligate script. Use the new FAX version. The disk version no longer work.

Date: 3/10/93 **Time:** 4:31 p.m. **Name:** Donna
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Welcome back! I'm glad you didn't disappear in the floods or get frightened to death by tarantulas. I need the new software for the IBM for the PC instructor at CWEP. Mine (the old) seems to work fine from work, but when she tried to install it, she got an error message that a new version was needed.

See ya!

Date: 3/10/93 **Time:** 11:40 **Name:** Bob Hubel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

(Ben, this is what I sent to Pedro:)
As I mentioned to you on thephone, the script on the disk used to work fine with intelligate BEFORE they changed their signon pages. After we discovered their change, we then issued a FAX to Ben with a new Intelligate script. Use the new FAX version. The disk version no longer works

---

Date: 3/10/93 **Time:** 4:31 p.m. **Name:** Donna
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Welcome back! I'm glad you didn't disappear in the floods or get frightened to death by tarantulas. I need thenew software for the IBM for the PC instructor at CWEP. Mine (the old) seems to work fine from work, but when she tried to install it, she got an error message that a new version was needed. See ya!

Date: 3/11/93 **Time:** 7:13 p.m. **Name:** Donna
Type: ○ General ● System ○ Courseware
To: ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ● Teacher ○ Support ○ CYBIS
Comment:

Terry, I don't know if I have intelligate5. We use a doc called power Learning to sign on. If I upgrade their disks, do I leave the system folder and just replace power Learning and MAC Cybis? Maybe there is another file too, I am at my IBM so I can't check. Also, do I go into intelligate5 and put their student numbers in like I did on Power Learning? And, what is a family? Is there a place I should read up on families i nthe CD handbook? I sent a note to Ben asking for the new IBM software for CWEP. Maybe I could arrange to get all the new stuff from you, if you are closer. Or, I can stop down at Drexel on my way home from my day job. Thanks! - Donna

---

Date: 3/11/93 **Time:** 11:04 **Name:** Ben
Type: ○ General ● System ○ Courseware
To: ○ Learner ● Teacher ○ Support ○ CYBIS
From: ○ Learner ○ Teacher ● Support ○ CYBIS
Comment:

I am sending you a fax with this same information, but here's this. It may be that some of the characters are control signals, and mess up the communication. There are carets (^), astericks (*), number signs (#), and m's. I'm not sure, but I think the carets indicate that a message is coming, number signs indicate delays to make the system wait (sometimes intelligate demands a pause before entering something, and # creates this delay), m's indicate carriage returns, and I'm not sure about the astericks. However, I think some of the waits and so on may be different from the mac version, because each computer will run at a different speed (sigh). If you log on one step at a time, you will notice that the network prompts you with statements like "Enter your choice below:" or "Input your userid and press ENTER." It is these messages that the computer is responding to. The changes from the old signon are both in changed prompts (formerly "below, below, below, ENTER, ENTER," now "below, below, below, ENTER, following") and in waits.

Date: 3/11/93 **Time:** 11:23 **Name:** Ben
Type: ○ General ● System ○ Courseware
To: ○ Learner ● Teacher ○ Support ○ CYBIS
From: ○ Learner ○ Teacher ● Support ○ CYBIS
Comment:

Network Prompt	Macintosh Response
(blank)	^#^m^#^m
^*^*^*below:	2158756602^m^#^#^#
^*^*below	111111^m^*^*^*
^*^*below:	6315^m
^*^*^*ENTER.	1^m
^*^*^*following:	^*1^m

Again, this works from my mac, with my times. I hope we can find the appropriate analogs for PCs. Lets try to get this done by the weekend. Thanks! I'll be online tonight for some time. Let me know how it works. Bye, Ben

---

Date: 3/12/93 **Time:** 10:24 **Name:** Ludo
Type: ○ General ● System ○ Courseware
To: ○ Learner ○ Teacher ● Support ○ CYBIS
From: ○ Learner ● Teacher ○ Support ○ CYBIS
Comment:

Ben, I have trouble accessing the phi00009 number from Perkins Morris at 1981 N. Woodstock St. My password is invalis, at least that's what the computer tells me. What to do?
Did you get my phone messages?
Ludo

Date: 3/12/93 **Time:** 10:24 **Name:** Ludo
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, I have trouble accessing the phi00009 number from Perkins Morris at 1981 N. Wookstock Street. My password is invalis, at least that's what the computer tells me. What to do? Did you get my phone messages? Ludo

---

Date: 3/14/93 **Time:** 10:38 **Name:** Sam
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Hi Ben,
I read your note on 3/12/93. One of my students has an IBM computer and wanted to have a system disk. If you have one, please let me know or bring it with you on March 18.
See you at MCOL.
Sam

Date: 3/14/93 **Time:** 10:38 **Name:** Sam
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Hi Ben, I read your note on 3/12/93. One of my students has an IBM computer and wanted to have a system disk. If youhave one,please let me know or bring it iwth you on March 18. See you at MCOL.

Date: 3/16/93 **Time:** 9:32 a.m. **Name:** Miriam Hecksel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hey Ben,
What is going on with Pedro and the access software? Does Hubel need to get involved again or possible Jeff Bauer who wrote the PCCK software and recently added the scripting for you? Please let me know; I could have Jeff call you today.
Take care. Miriam

Date: 3/16/93 **Time:** 2:13 p.m. **Name:** Ludo
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, Today I am working on the computers at Red Shield Residence accessing IMSATT under my number in phiadmin. However, I cannot access IMSATT through the 00009 number. My password seems to be invalid. Any ideas?
Hope you got my messages regarding the conference, the next class we would like to schedule to make the group more familiar with IMSATT, etc. Hope to get together with you soon. Oh, by the way, have you or Jan heard anything re the three external hard drives? Thanks for all your help so far. You should know that the people who came to the workshop wree excited about learning more about the computer, and you received high praise (well, of course I received higher) for the workshop. Talk to you soon I hope! Ludo.

Date: 3/16/93 **Time:** 2:21 p.m. **Name:** Ludo
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, while using one computer at Red Shield, the other computer kept getting a busy signal, even though it was two different lines. You have any suggestiosn as to what the problem could be? I tried to reconnect several times. Now that I have disconnected from the other computer I can access IMSATT from the other computer.
Ludo

Date: 3/16/93 **Time:** 3:17 p.m. **Name:** Bob Hubel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ● Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

To: Pedro cc: Ben Have you get PCCK working now with scripts? Here's a screen that works for me (at least on 3 consecutive attempts) may not be optimized, but if you're still having problems , try this one. (To fit it all in 1 pnote, I put it in 2 columns. Enter the 1st column, followed by the 2nd.

1. send ATDT12159289800
2. expect CONNECT
3. send wait 2
4. send <CR>
5. send wait 2
6. send <CR>
7. send wait 2
8. send <CR>
9. send wait 2
10. expect below:
11. send 3019893717
12. send wait 2
13. expect below:
14. send gateway
15. send wait 2
16. expect below:
17. send 1685
18. send wait 2
19. expect ENTER
20. send 1
21. send wait 2
22. expect following:
23. send 1

Date: 3/16/93 **Time:** 9:32 a.m. **Name:** Miriam Hecksel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hey Ben, What is going on with Pedro and the access software? Does Hubel need to get involved again or possibly Jeff Bauer who wrote the PCCK Software and recently added the scripting for you? Please let me know; I could have Jeff callyou today. Take care Miriam.

Date: 3/16/93 **Time:** 2:13 p.m. **Name:** Ludo
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, Today I am working on the computers at Red Shield Residence accessing IMSATT under my number in phiadmin. However, I cannot access IMSATT through the 00009 number. My password seems to be invalid. Any ideas? Hope you got my messaes regarding the conference, the next class we would like to scheduel to make th group more familiar with IMSATT, etc. Hope to get together with you soon. Oh, by the way, have you or Jan heard anythingre: the three external harddrives? Thanks for allyou help so far. You should know that the people who came to the workshop were excited about learning more about the computer, and you received high praise (well, or course I received higher) for the workshop. Talk to you soon I hope! Ludo

---

Date: 3/16/93 **Time:** 2:21 p.m. **Name:** Ludo
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Ben, while using one computer at Red Shield, the other computer kept getting a busy signal, even though they are two different lines. You have any suggestions as to what the problem could be? I tried to reconnect several times. Now that I have disconnected from theother computer I can access IMSATT from the other computer.

Ludo

Date: 3/18/93 **Time:** 5:29 p.m. **Name:** John
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Hello, Hello, Hello,
I related what appeared to be a system failure at the MCOL meeting today, and when I arrived home, I had a message from a learner expressing similar concerns. I spoke with her and she described crooked lines appearing on her screen along with a locking of her commands. This is essentially what I experienced with two learners this morning at the Necetown site and she has had this happen at least three times that she can remember. Needless to say, she was pretty frustrated.
Anyway, thought I would pass along the info. Enjoy it! John, CFL

Date: 3/22/93 **Time:** 12:46 **Name:** Terry
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Instructors: The process of monitoring and term-talking a learner who is in a lesson is as follows:

1. Type=philusers= at the What Lesson? prompt.
2. Find th elearner on the current user list shown.
3. Make a note of the group name next to the learners name. This is the lesson that the learner is currently doing.
4. Press Shift-Stop to return to main menu.
5. Type the new group name at the What Lesson? prompt.
6. Choose selection2 (Roster) from the menu.
7. Choose selection F (see who is running) from the menu
8. Choose either 1 to talk to the learner or 3 to monitor the learner.

Date: 3/24/93 **Time:** 5:23 p.m. **Name:** Buit
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ○ Support ○ CYBIS

basic math

Date: 4/13/93 **Time:** 8:43 p.m. **Name:** Terry
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi Miriam, How are you? I hope you're fine. One of my learners, grayd, received this message: Please report the following to your CLM instructor: there is an error in the data returned from CYBIS lesson test "qzsmtest". Earnered score is greater than possible score. Also, mcintyrec and metzcher1 both said they were working in a lesson and all of the sudden they were back at the login screen. They had to login to get back on the system. I'm no expert, but this sounds like someone, an instructor , signed them out. I tried t ochange that option in the instructor's optiosn menu, but it wouldn't let me, I only had read capabilities. Is there some way you can change it on all the instructors. I don't want my group hassled by this anymore. Thanks for your help.
Take care, Terry

Date: 4/14/93 **Time:** 9:07 a.m. **Name:** Miriam Hecksel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Terry, Do you want me to go in and take away the option to "kick off users" from the instructors? I can do that for you if that is what you are requesting. Are you sure that is what happened to these students? If they were working on Saturday, in the evening, they were kicked off by the operators here. Dave Runte was signed on and he got kicked off with no warning and he saw a few Philly users signed on. They would not have been able to sign on again, so maybe this was not the case. Let me know if you want those options changed.
As far as that error message in CLM, I will have someone look at it right away!
See ya!
Miriam
PS. Could you fax us the information on your Literacy Conferenc ein early May: Thanks.

Date: 4/15/93 **Time:** 9:20 a.m. **Name:** Miriam Hecksel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hello,
I have changed the options for each instructor so that they can no longer sign off a student (if that is indeed what is happening.) The reason you couldn't change these options is because there is a security code on this group so that not just anyone can wander in and do any damage. I will give you the code in case you need to modify group =phiadmin in the future. It is: enter.
See ya.
Miriam

Date: 4/26/93 **Time:** 3:03 **Name:** Nat Kannan
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Dear Donna,
I spoke to bob huntsberger at bell atl. about the delays in getting through the intelligate and it turns out to be a matter of $$$. IMSATT has leased lines to Minn but to use them we get charged $5-$6 per hr. It will be uneconomical for this project. So we settled on Internet. It could be speeded up if Bell invested $20,000 in a special hardware. But they don't have the budget. I will try to explore other alternatives. I am sorry about this. But I believe there are creative solutions that are possible. I will keep you posted. Nat Kannan cc: Ben Burenstein

---

Date: 4/29/93 **Time:** 4:10 p.m. **Name:** Terry
Type: ○ General ● System ○ Courseware **To:** ○ Learner ● Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hello Instructors: If any of your learners have been experiencing the problem of trying to enter a lesson but being sent directly back to the main menu, please be patient; CDC has been notified of this problem and is trying very hard to solve it.
Also, if any of your learners are experiencing a "loop" with the Language and Math curriculum, meaning that they master the test, take the reinforcement curriculum, and still can't get past the module, this too is being looked at by CDC and hopefully will be solved shortly.
Thank you CDC for being so attentive to our problems. Terry

Date: 4/30/93 **Time:** 5:23 p.m. **Name:** Pedro
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

You are welcome
I've the copy of the diskettes. I'll try to get originals to you by Monday, Mary 3rd.

PPM.1830 hrs.4/30

Date: 5/11/93 **Time:** 8:19 p.m. **Name:** Legares
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

-----notes from lesson: plmreturn
curriculum = obslang module = +
The computer is acting really crazy. It keep on doing tests over again. It will not complete the tests. Why is it doing that? They're only three users on the computer.

Date: 5/18/93 **Time:** 10:29 **Name:** Miriam Hecksel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Terry,
I just got off the phone with Chris. He instructed Bob Hubel to load the oldest backup tape he has in the building (April 11) and Chris is going to modify =philuse so that you can pull in the old data. There will be some overlap, obviously, but you will be able to retrieve some of the statistics that you need. Chris hopes to have the programming dones as early as this afternoon. I will send you a note or call you when you are able to get SOME of the old data. Hope this helps. Miriam

---

Date: 5/22/93 **Time:** 2:37 **Name:** Nat
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hi Ben, from now on please do not use the 800 number at all. I have a compuserve link. Please call by voice 1-800-848-8990 and use option number 3 I believe. You can find your local access numbers for 2400 baud or 9600 baud connections from philly. Dial you localnumber and you will be prompted for a host. Type HOMER and press carriage return. Viola. You will be linked to cybis as much better speed than Bell Atlantic. Between now and June 1, all the students can use the compuserve access at my expense. Hopefully by then we will figure out some other alternative. The Phiadmin group should use only compuserve from now on until the end of the project. You may have to make appropriate changes to your script files for auto sign on. I look forward to seeing you on the 27th. NAT.

Date: 5/26/93 **Time:** 2:40 p.m. **Name:** Miriam Hecksel
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Hello, Terry
Hmmmm, The two problems you just reported are different from what we have experienced thus far. Encourage the learners to send a Term-Comment when they have these problems. But back to your questions. If you discover anything wit hthe Social Studies, please let me know. I will also go in and take a look at it. As far as Lillian, what course is he in? Without sounding insensitive, it sounds like either she is pressing the wrong keys or the keyboard is faulty. I have never heard of this before but who knows! Let me know what course she is in (and Module) and I will see what we can do.
I am sad to hear about the farewell. I wish we could have kept everything doing. See you.
M

Date: 5/28/93 **Time:** 8:07 p.m. **Name:** Mcsorleyj
Type: ○ General ● System ○ Courseware **To:** ○ Learner ● Teacher ○ Support ○ CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Scot or anyone out there - from mcsorleyj in phi00003: for two nights we keep crashing!!!! In middle of tutorial or drillk or test, it keeps taking Jack out and saying DATA TOON CONTINUE or SHIFSTOP!!!! Then you have to totally start tutorial or drill or test over from beginning. Jack cannot work like this, it's crazy!!! All since we went back to ......way nbCan hsomeone help????? Bye

Date: 5/28/93 **Time:** 6:58 p.m. **Name:** Mcsorleyj
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ● CYBIS
Comment: **From:** ● Learner ○ Teacher ○ Support ○ CYBIS

Mcsorleyj - doing the same thing as last night: in middle of tutorials, cybis goes back to DATTCONTGIN DATA TO CONTINUE and you have to start tutorial again. Does anyone really read these notes? The same things keep happening and no one answers me.

Date: 6/1/93 **Time:** 2:11 p.m. **Name:** Scot
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Hi Terry,
Well I got on using intelegate. Boy is it slow today. Maybe there is a wire problem.
by
Scot

Date: 6/1/93 **Time:** 1:24 p.m. **Name:** Terry
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ○ Support ○ CYBIS
Comment: **From:** ○ Learner ○ Teacher ● Support ○ CYBIS

Have you sent the new logon information to the other centers yet? If not we have to hurry so as not to create problems. If you want me to do it let me know.

Date: 6/8/93 **Time:** 4:15 p.m. **Name:** Sam
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Hi Terry,
I am waiting for an internet password of Tam Le who lives at 334 Sheldon Street, Phila., PA 19120. Her telephone number is 457-0148.
Please also register two new students who also interest in this program.
Ha, Quy N., 4928 N. Broad Street, Phila., PA, 19141, 455-8673
Pham, Trang P., 1127 W. Rockland Street, Phila., PA 19141, 455-0992
Thank you for your time and hope to hear from you soon.
Sam

Date: 6/9/93 **Time:** 9:19 a.m. **Name:** John
Type: ○ General ● System ○ Courseware **To:** ○ Learner ○ Teacher ● Support ○ CYBIS
Comment: **From:** ○ Learner ● Teacher ○ Support ○ CYBIS

Hi Terry:
P-noting to see where we stand on securing a new account number for CFL's "last, but not least" twelth learner.
If you would, please leave a note.
Thank you,
John

ATTACHMENT 8:
EXAMPLES OF CYBIS USAGE DATA

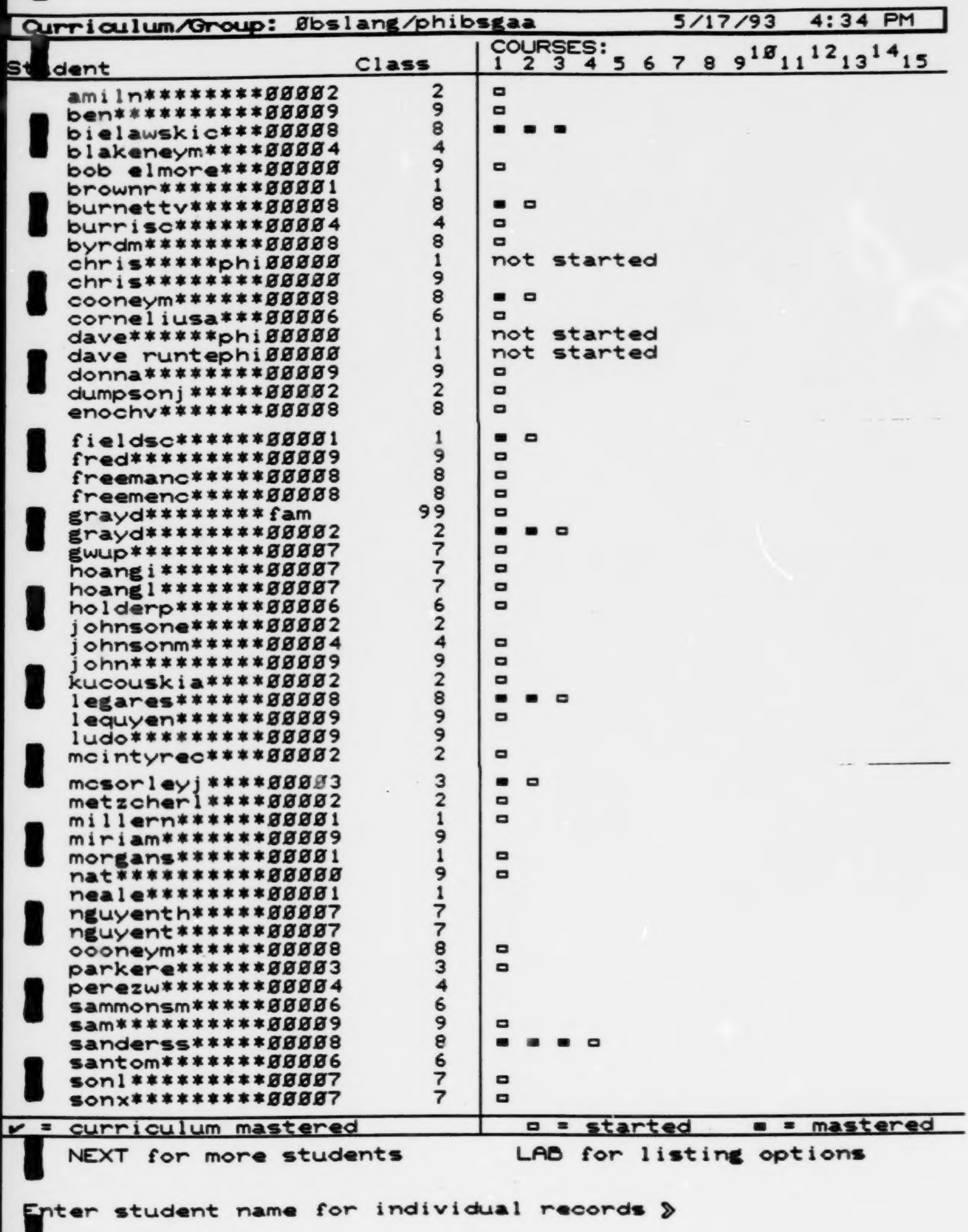
```
Curriculum/Group: 0bslang/phibsgaa                5/19/93   9:08 AM
                                              ──────── Current ────────
  Student                      Class   VMS   Course Module Status
  ─────────────────────────────────────────────────────────────────
  amiln*********00002            2      1       1      X
  ben***********00009            9      1       1      M
  bielawskic****00008            8      1       3      M
  blakeneym*****00004            4      1
  bob elmore****00000            9      1       1      C
  brownr********00001            1      1
  burnettv******00008            8      1       2      B
  burrisc*******00004            4      1
  byrdm*********00008            8      1       1      E
* chris*****phi00000             1      1
  chris*********00000            9      1
  cooneym*******00008            8      1       2      M
  corneliusa****00006            6      1
* dave******phi00000             1      1
* dave runtephi00000             1      1
  donna*********00009            9      1       1      X
  dumpsonj******00002            2      1       1      A
  enochv********00008            8      1       1      A
  ─────────────────────────────────────────────────────────────────
  fieldsc*******00001            1      1       2      F
  fred**********00009            9      1       1      C
  freemanc******00008            8      1
  freemenc******00008            8      1
  grayd*********fam             99      1       1      E
  grayd*********00002            2      1       3      J
  gwup**********00007            7      1       1      C
  hoangi********00007            7      1       1      C
  hoangl********00007            7      1       1      C
  holderp*******00006            6      1       1      C
  johnsone******00002            2      1
  johnsonm******00004            4      1       1      C
  john**********00009            9      1       1      D
  kucouskia*****00002            2      1       1      C
  legares*******00008            8      1       3      K
  lequyen*******00009            9      1       1      C
  ludo**********00009            9      1
  mcintyrec*****00002            2      1       1      L
  ─────────────────────────────────────────────────────────────────
  mcsorleyj*****00003            3      1       3      E
  metzcherl*****00002            2      1       1      B
  millern*******00001            1      1
  miriam********00009            9      1
  morgans*******00001            1      1       1      B
  nat***********00000            9      1       1      C
  neale*********00001            1      1
  nguyenth******00007            7      1
  nguyent*******00007            7      1
  oooneym*******00008            8      1       1      O
  parkere*******00003            3      1
  perezw********00004            4      1
  sammonsm******00006            6      1
  sam***********00009            9      1       1      O
  sanderss******00008            8      1       4      E
  santom********00006            6      1
  sonl**********00007            7      1       1      Z
  sonx**********00007            7      1
  ─────────────────────────────────────────────────────────────────
  ✓ = curriculum mastered
  ─────────────────────────────────────────────────────────────────
  NEXT for more students             LAB for listing options

Enter student name for individual records ❯
```

A = 1
✓
12th

PHIBSGAA

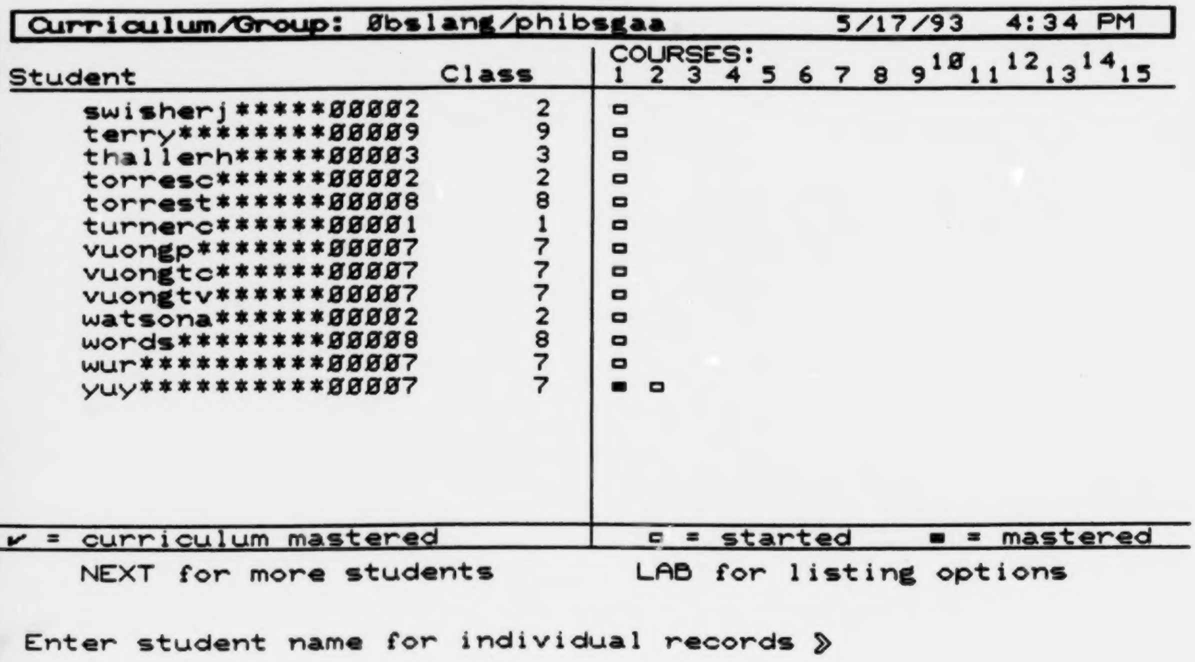
Basic Skills Grammar

```
Curriculum/Group: 0bslang/phibsgaa               5/19/93   9:09 AM
                                              ——— Current ———
 Student                        Class   VMS   Course Module Status
 swisherj*****00002               2      1      1      J
 terry********00009               9      1      1      G
 thallerh*****00003               3      1      1      C
 torresc******00002               2      1
 torrest******00008               8      1
 turnerc******00001               1      1      1      A
 vuongp*******00007               7      1      1      B
 vuongtc******00007               7      1
 vuongtv******00007               7      1      1      D
 watsona******00002               2      1      1      C
 words********00008               8      1      1      J
 wur**********00007               7      1      1      A
 yuy**********00007               7      1      2      R

 ✓ = curriculum mastered
   NEXT for more students            LAB for listing options

Enter student name for individual records »
```



```
Curriculum/Group: 0bslang/phibsgaa          5/17/93   4:34 PM
                                     | COURSES:
Student                       Class  | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
   amiln*********00002          2    | □
   ben***********00009          9    | □
   bielawskic****00008          8    | ■ ■ ■
   blakeneym*****00004          4    |
   bob elmore****00000          9    | □
   brownr********00001          1    |
   burnettv******00008          8    | ■ □
   burrisc*******00004          4    | □
   byrdm*********00008          8    | □
   chris*****phi00000           1    | not started
   chris*********00000          9    |
   cooneym*******00008          8    | ■ □
   corneliusa****00006          6    | □
   dave*****phi00000            1    | not started
   dave runtephi00000           1    | not started
   donna*********00009          9    | □
   dumpsonj******00002          2    | □
   enochv********00008          8    | □
   fieldsc*******00001          1    | ■ □
   fred**********00009          9    | □
   freemanc******00008          8    | □
   freemenc******00008          8    | □
   grayd*********fam           99    | □
   grayd*********00002          2    | ■ ■ □
   gwup**********00007          7    | □
   hoangi********00007          7    | □
   hoangl********00007          7    | □
   holderp*******00006          6    | □
   johnsone******00002          2    |
   johnsonm******00004          4    | □
   john**********00009          9    | □
   kucouskia*****00002          2    | □
   legares*******00008          8    | ■ ■ □
   lequyen*******00009          9    | □
   ludo**********00009          9    |
   mcintyrec*****00002          2    | □
   mcsorleyj*****00003          3    | ■ □
   metzcherl*****00002          2    | □
   millern*******00001          1    | □
   miriam********00009          9    |
   morgans*******00001          1    | □
   nat***********00000          9    | □
   neale*********00001          1    |
   nguyenth******00007          7    |
   nguyent*******00007          7    |
   oooneym*******00008          8    | □
   parkere*******00003          3    | □
   perezw********00004          4    |
   sammonsm******00006          6    |
   sam***********00009          9    | □
   sanderss******00008          8    | ■ ■ ■ □
   santom********00006          6    |
   sonl**********00007          7    | □
   sonx**********00007          7    | □
✔ = curriculum mastered              |   □ = started     ■ = mastered
   NEXT for more students               LAB for listing options

Enter student name for individual records »
```

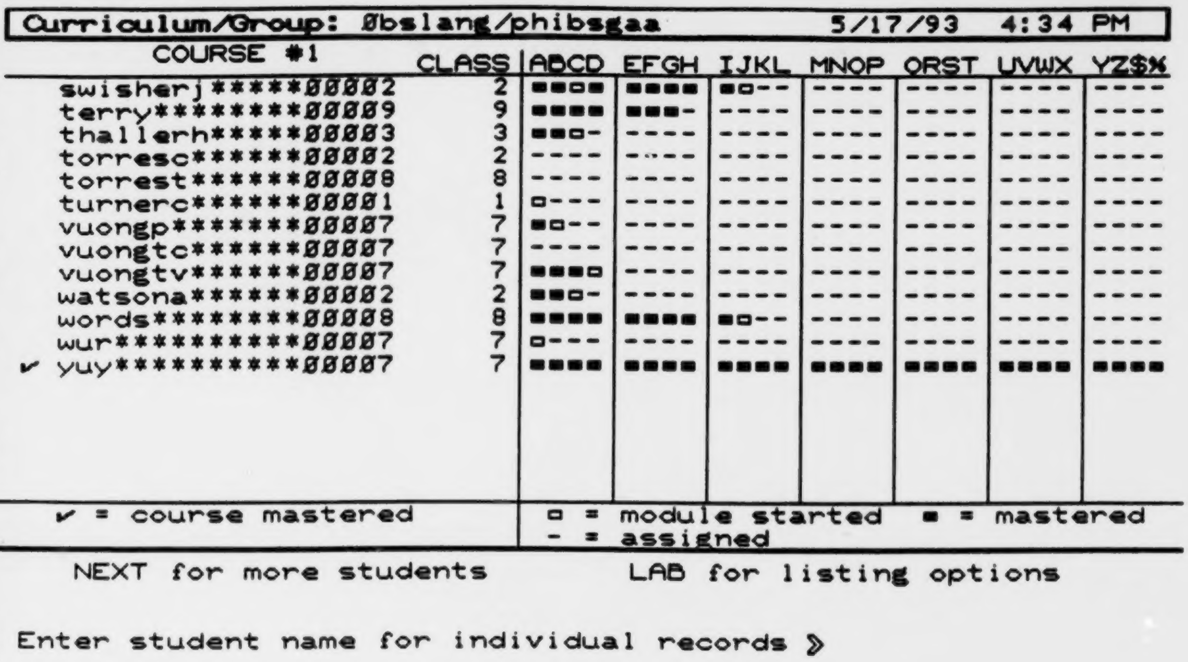
BEST COPY AVAILABLE



```
Curriculum/Group: 0bslang/phibsgaa               5/17/93   4:34 PM
                                          COURSES:
Student                        Class      1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
      swisherj*****00002         2        □
      terry********00009         9        □
      thallerh*****00003         3        □
      torresc******00002         2        □
      torrest******00008         8        □
      turnerc******00001         1        □
      vuongp*******00007         7        □
      vuongtc******00007         7        □
      vuongtv******00007         7        □
      watsona******00002         2        □
      words********00008         8        □
      wur**********00007         7        □
      yuy**********00007         7        ■ □

✓ = curriculum mastered                     □ = started      ■ = mastered
      NEXT for more students              LAB for listing options

  Enter student name for individual records »
```

```
Curriculum/Group: 0bslang/phibsgaa              5/17/93   4:34 PM
          COURSE #1         CLASS |ABCD  EFGH  IJKL  MNOP  ORST  UVWX  YZ$%
   amiln*********00002        2   |■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■□  ----
   ben***********00009        9   |■■■■  ■■■■  ■■■■  ■---  ----  ----  ----
✓  bielawskic***00008         8   |■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■
   blakeneym****00004         4   |
   bob elmore***00000         9   |--■-  ----  ----  ----  ----  ----  ----
   brownr*******00001         1   |
✓  burnettv*****00008         8   |■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■
   burrisc******00004         4   |----  ----  ----  ----  ----  ----  ----
   byrdm********00008         8   |■■■■  □---  ----  ----  ----  ----  ----
*  chris*****phi00000         1   |
   chris********00000         9   |
✓  cooneym******00008         8   |■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■
   corneliusa***00006         6   |----  ----  ----  ----  ----  ----  ----
*  dave******phi00000         1   |
*  dave runtephi00000         1   |
   donna********00009         9   |■■■■  ■■■■  ■■■■  ■■■-  ■■■■  ■■■■  ----
   dumpsonj*****00002         2   |■■□-  ----  ----  ----  ----  ----  ----
   enochv*******00008         8   |□---  ----  ----  ----  ----  ----  ----
✓  fieldsc******00001         1   |■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■
   fred*********00009         9   |■■■-  ----  ----  ----  ----  ----  ----
   freemanc*****00008         8   |----  ----  ----  ----  ----  ----  ----
   freemenc*****00008         8   |----  ----  ----  ----  ----  ----  ----
   grayd*********fam         99   |■■■■  □---  ----  ----  ----  ----  ----
✓  grayd********00002         2   |■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■
   gwup*********00007         7   |■■□-  ----  ----  ----  ----  ----  ----
   hoangi*******00007         7   |■■□-  ----  ----  ----  ----  ----  ----
   hoangl*******00007         7   |■■□-  ----  ----  ----  ----  ----  ----
   holderp******00006         6   |■■□-  ----  ----  ----  ----  ----  ----
   johnsone*****00002         2   |
   johnsonm*****00004         4   |■■□-  ----  ----  ----  ----  ----  ----
   john*********00009         9   |■■■□  ----  ----  ----  ----  ----  ----
   kucouskia****00002         2   |■■□-  ----  ----  ----  ----  ----  ----
✓  legares******00008         8   |■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■
   lequyen******00009         9   |■■□-  ----  ----  ----  ----  ----  ----
   ludo*********00009         9   |
   mcintyrec****00002         2   |■■■■  ■■■■  ■■■■  ■■■-  ----  ----  ----
✓  mcsorleyj****00003         3   |■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■
   metzcherl****00002         2   |■□--  ----  ----  ----  ----  ----  ----
   millern******00001         1   |----  ----  ----  ----  ----  ----  ----
   miriam*******00009         9   |
   morgans******00001         1   |■■--  ----  ----  ----  ----  ----  ----
   nat**********00000         9   |■■■-  ----  ----  ----  ----  ----  ----
   neale********00001         1   |
   nguyenth*****00007         7   |
   nguyent******00007         7   |
   oooneym******00008         8   |■■■■  ■■■■  ■■■■  ■■■-  ----  ----  ----
   parkere******00003         3   |----  ----  ----  ----  ----  ----  ----
   perezw*******00004         4   |
   sammonsm*****00006         6   |
   sam**********00009         9   |■■■■  ■■■■  ■■■■  ■■□-  ----  ----  ----
✓  sanderss*****00008         8   |■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■
   santom*******00006         6   |
   sonl*********00007         7   |■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■■■  ■■--
   sonx*********00007         7   |----  ----  ----  ----  ----  ----  ----
   ✓ = course mastered            |□ = module started   ■ = mastered
                                  |- = assigned

   NEXT for more students          LAB for listing options

Enter student name for individual records »
```

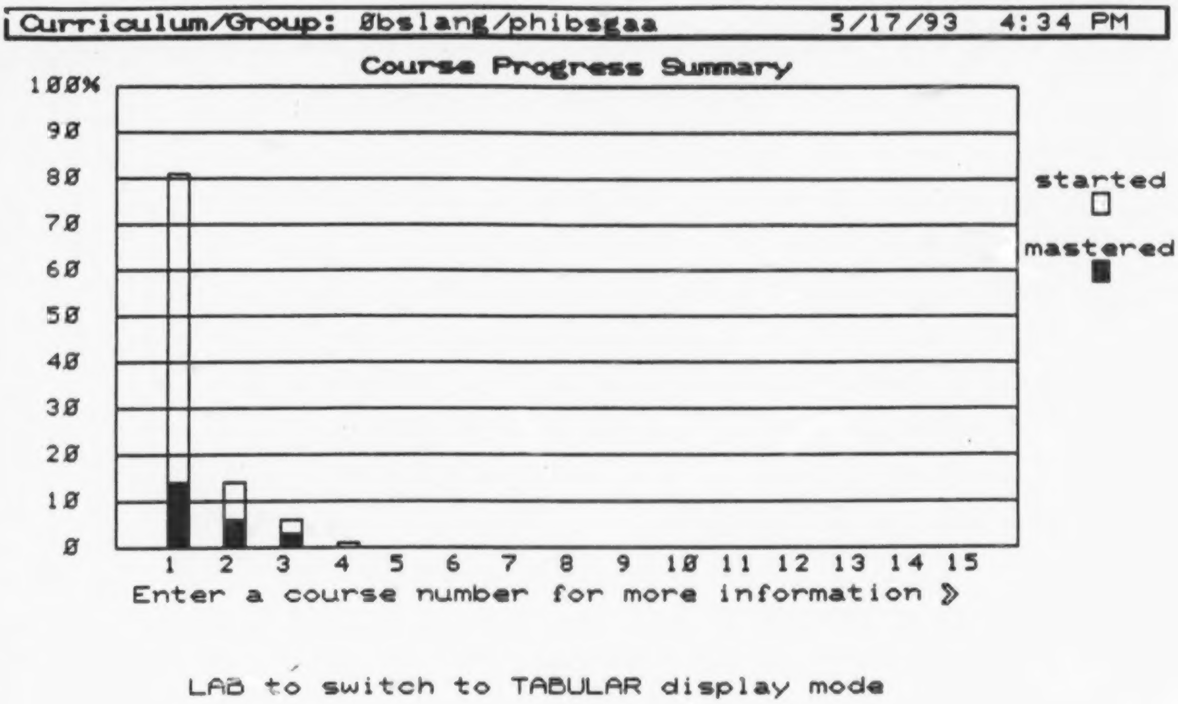
BEST COPY AVAILABLE



```
Curriculum/Group: 0bslang/phibsgaa          5/17/93   4:34 PM
            COURSE #1
                                   CLASS |ABCD  EFGH  IJKL  MNOP  ORST  UVWX  YZ$%
   swisherj*****00002                 2  |■■□■ |■■■■ |■□-- |---- |---- |---- |----
   terry********00009                 9  |■■■■ |■■■- |---- |---- |---- |---- |----
   thallerh*****00003                 3  |■■□- |---- |---- |---- |---- |---- |----
   torresc******00002                 2  |---- |---- |---- |---- |---- |---- |----
   torrest******00008                 8  |---- |---- |---- |---- |---- |---- |----
   turnerc******00001                 1  |□--- |---- |---- |---- |---- |---- |----
   vuongp*******00007                 7  |■□-- |---- |---- |---- |---- |---- |----
   vuongtc******00007                 7  |---- |---- |---- |---- |---- |---- |----
   vuongtv******00007                 7  |■■■□ |---- |---- |---- |---- |---- |----
   watsona******00002                 2  |■■□- |---- |---- |---- |---- |---- |----
   words********00008                 8  |■■■■ |■■■■ |■□-- |---- |---- |---- |----
   wur**********00007                 7  |□--- |---- |---- |---- |---- |---- |----
 ✓ yuy**********00007                 7  |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■

   ✓ = course mastered               |  □ = module started    ■ = mastered
                                     |  - = assigned

   NEXT for more students              LAB for listing options

Enter student name for individual records »
```

```
Curriculum/Group: 0bslang/phibsgaa            5/17/93  4:34 PM

                                               Last Module
     Student                          Class      Mastery
     amiln********00002                 2        5/06/93
     ben**********00009                 9        2/15/93
     bielawskic***00008                 8        5/16/93
     blakeneym****00004                 4       Unknown
     bob elmore***00000                 9        4/08/93
     brownr*******00001                 1       Unknown
     burnettv*****00008                 8        4/26/93
     burrisc******00004                 4       Unknown
     byrdm********00008                 8        4/03/93
     chris*****phi00000                 1       not started
     chris********00000                 9       Unknown
     cooneym******00008                 8        3/27/93
     corneliusa***00006                 6       Unknown
     dave*****phi00000                  1       not started
     dave runtephi00000                 1       not started
     donna********00009                 9        3/11/93
     dumpsonj*****00002                 2        4/01/93
     enochv*******00008                 8       Unknown

     fieldsc******00001                 1        4/21/93
     fred*********00009                 9        1/20/93
     freemanc*****00008                 8       Unknown
     freemenc*****00008                 8       Unknown
     grayd*******fam                   99        5/10/93
     grayd********00002                 2        5/13/93
     gwup*********00007                 7        4/30/93
     hoangi*******00007                 7        5/13/93
     hoangl*******00007                 7        5/06/93
     holderp******00006                 6        4/28/93
     johnsone*****00002                 2       Unknown
     johnsonm*****00004                 4        3/31/93
     john*********00009                 9        3/10/93
     kucouskia****00002                 2        3/04/93
     legares******00008                 8        5/13/93
     lequyen******00009                 9        1/05/93
     ludo*********00009                 9       Unknown
     mcintyrec****00002                 2        2/17/93

     mcsorleyj****00003                 3        5/16/93
     metzcherl****00002                 2        3/11/93
     millern******00001                 1       Unknown
     miriam*******00009                 9       Unknown
     morgans******00001                 1        3/02/93
     nat**********00000                 9        3/19/93
     neale********00001                 1       Unknown
     nguyenth*****00007                 7       Unknown
     nguyent******00007                 7       Unknown
     oooneym******00008                 8        2/24/93
     parkere******00003                 3       Unknown
     perezw*******00004                 4       Unknown
     sammonsm*****00006                 6       Unknown
     sam**********00009                 9        5/03/93
     sanderss*****00008                 8        5/07/93
     santom*******00006                 6       Unknown
     sonl*********00007                 7        5/10/93
     sonx*********00007                 7       Unknown

   NEXT for more students        LAB for listing options

Enter student name for individual records »
```

```
Curriculum/Group: 0bslang/phibsgaa          5/17/93   4:34 PM

                                                Last Module
         Student                       Class      Mastery
         swisherj*****00002              2        5/06/93
         terry********00009              9        3/02/93
         thallerh*****00003              3        3/01/93
         torresc******00002              2       Unknown
         torrest******00008              8       Unknown
         turnerc******00001              1       Unknown
         vuongp*******00007              7        4/15/93
         vuongtc******00007              7       Unknown
         vuongtv******00007              7        5/10/93
         watsona******00002              2        3/11/93
         words********00008              8        4/28/93
         wur**********00007              7       Unknown
         yuy**********00007              7        4/28/93

   NEXT for more students          LAB for listing options

Enter student name for individual records »
```



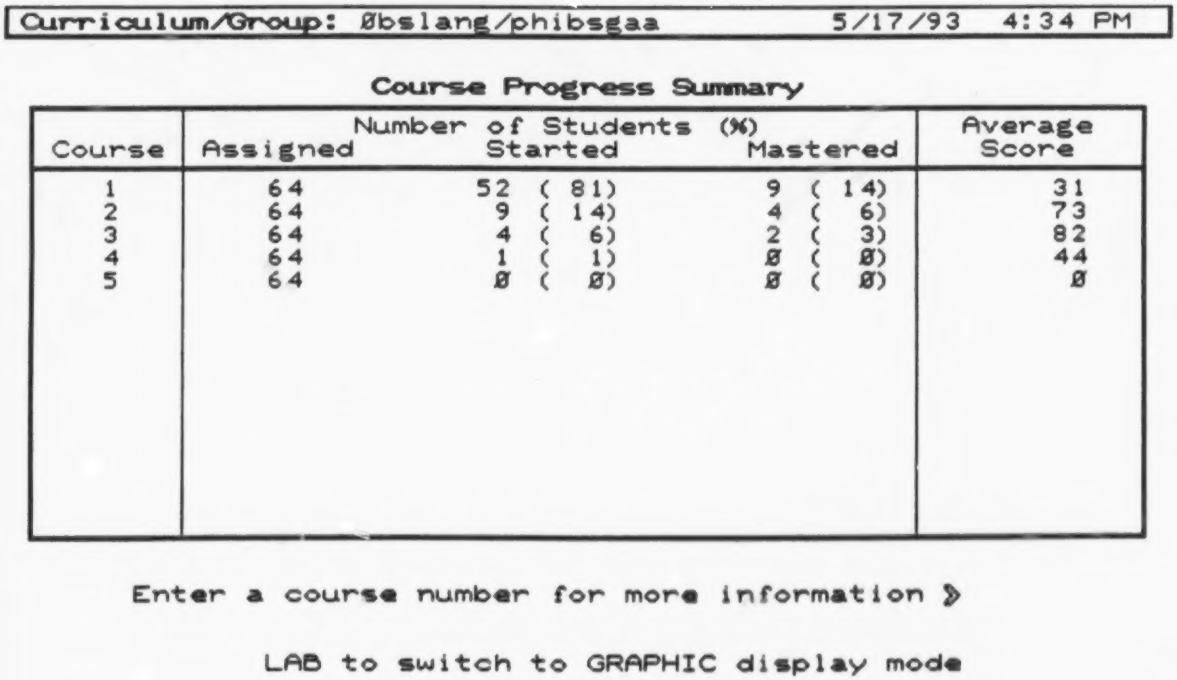
Curriculum/Group: 0bslang/phibsgaa 5/17/93 4:34 PM

Course Progress Summary

100%
90
80
70
60
50
40
30
20
10
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
started
mastered

Enter a course number for more information »

LAB to switch to TABULAR display mode



Curriculum/Group: 0bslang/phibsgaa 5/17/93 4:34 PM

Course Progress Summary

Course	Number of Students (%)			Average Score
	Assigned	Started	Mastered	
1	64	52 (81)	9 (14)	31
2	64	9 (14)	4 (6)	73
3	64	4 (6)	2 (3)	82
4	64	1 (1)	0 (0)	44
5	64	0 (0)	0 (0)	0

Enter a course number for more information »

LAB to switch to GRAPHIC display mode

Record usage for group phigreaa as of 05/19/93: GED READING

		Last On		Days	Hours	Sess.	CPU
arrovoc******00008	s	03/21/93	18:18	1	0.1	1	1.9
ben**********00009	s	11/13/92	11:16	2	1.1	2	0.4
bibbsh*******00006	s	04/27/93	17:19	1	0.5	1	1.7
burnettv*****00008	s	03/11/93	18:27	1	1.2	1	0.3
burrisc******00004	s	04/23/93	20:48	4	1.5	6	0.7
byrdm********00008	s	03/12/93	17:41	1	0.8	1	0.7
chris********00000	s	01/08/93	17:32	3	0.0	3	2.8
colonl*******00002	s	04/22/93	19:14	6	10.4	8	1.1
dangt********00007	s	02/25/93	19:04	1	0.0	1	10.4
davish*******00004	s	03/23/93	10:27	2	0.1	2	3.4
dumpsonl*****00002	s	03/18/93	18:07	1	0.5	2	0.8
enochv*******00008	s	03/16/93	19:37	5	2.3	5	1.6
fieldsc******00001	s	03/24/93	15:40	1	2.2	1	1.1
freemanc*****00008	s	03/04/93	20:01	1	0.1	1	1.8
grayd********00002	s	02/12/93	16:52	2	0.8	4	0.5
gwup*********00007	s	05/06/93	13:55	1	0.2	1	1.4
hoangl*******00007	s	04/14/93	19:48	1	0.1	1	3.5
holderp******00006	s	04/27/93	20:30	7	4.8	9	0.8
johnsone*****00002	s	03/25/93	17:20	2	0.2	3	1.4
johnsorm*****00004	s	03/31/93	19:10	1	0.6	1	1.2
lebrong******00005	s	04/21/93	13:55	5	0.4	5	2.0
legares******00008	s	04/01/93	15:07	2	0.0	3	3.5
lequyen******00009	s	02/09/93	19:15	3	0.1	4	1.2
mcintyrec****00002	s	04/15/93	17:08	5	3.5	5	1.2
mcsorleyl****00003	s	04/25/93	16:42	3	0.1	3	2.4
metzcherl****00002	s	05/15/93	11:51	27	24.1	47	1.9
miriam*******00009	s	01/18/93	15:07	2	0.0	2	3.4
nesmithc*****00004	s	05/03/93	11:50	2	0.0	2	3.4
parkere******00003	s	05/06/93	21:22	1	0.0	1	5.5
pastorizad***00005	s	04/11/93	18:33	1	0.0	1	9.6
rosao00009	s	11/24/92	16:02	1	0.0	1	2.7
santom*******00006	s	05/13/93	20:14	3	2.2	3	0.8
testing******00009	s	01/18/93	09:40	1	0.0	1	6.9
torresc******00002	s	04/20/93	22:25	2	1.6	2	2.4
torress******00005	s	03/31/93	11:37	1	0.0	1	5.5
turnerc******00001	s	02/24/93	23:36	1	1.2	1	2.2
vuongp*******00007	s	03/24/93	19:29	1	0.2	2	3.9
vuongtc******00007	s	03/29/93	15:12	1	0.0	1	7.2
vuongtv******00007	s	03/26/93	17:53	1	0.0	1	7.3
watsona******00002	s	03/18/93	18:35	2	0.5	2	1.0
williamsk****00002	s	03/18/93	14:08	1	0.0	1	84.4
words********00008	s	03/31/93	19:47	1	0.1	1	1.8
yuy**********00007	s	05/07/93	19:35	7	13.0	13	0.5

Usage averages for group phigreaa as of 05/19/93:

	#	Days	Hours	Sessions	CPU
Students	43	3	1.7	4	4.6
Multiples					
Authors					
Instructors					

These statistics include only those records which have signed on at least once.

GED Math

```
Record usage for group phigmaaa as of 05/19/93:

                                 Last On           Days   Hours    Sess.   CPU
amlin*********0002      s   05/06/93   19:56      18      22.8      28     0.5
bielawskic****0006      s   05/15/93   13:21       1       1.0       1     1.6
blakeneym*****0004      s   05/13/93   10:46       1       0.0       1     4.1
burrough******0006      s   04/28/93   16:18       1       0.1       1     3.4
chrish********0001      s   01/18/93   10:39       1       0.0       3     3.6
chris*********0001      s   01/29/93   23:00       3       0.1       4     1.1
cookrellt*****0006      s   03/03/93   13:17       1       0.2       1     1.8
colonl********0002      s   04/13/93   13:39      14      21.7      21     0.7
dave*******ph 0001      s   10/25/92   18:14       1       0.0       1     0.3
dave**********0001      s   01/15/93   15:45       1       0.0       1    11.5
dave runteph  0001      s   10/22/92   17:13       1       0.0       1     2.4
davish********0004      s   03/09/93   10:50       1       0.3       1     1.3
dumpsonl******0002      s   04/01/93   17:16       9       4.6      13     0.5
ferris********0009      s   03/09/93   11:29       1       0.1       1     3.4
fieldsc*******0001      s   04/03/93   21:29       1       0.7       1     0.9
fisherl*******0004      s   03/18/93   10:50       1       0.2       1     1.3
grayd*********0002      s   05/05/93   13:22      13      23.7      23     1.1
gwup**********0007      s   05/06/93   10:59       1       0.0       1    85.6
hoangl********0007      s   04/15/93   21:02       1       0.1       1     2.9
hoangl********0007      s   03/30/93   19:10       1       0.2       1     2.3
holderp*******0006      s   04/13/93   13:12       1       0.1       1     3.0
johnsone******0002      s   04/15/93   05:10       2       0.7       3     0.4
john**********0009      s   02/16/93   09:31       1       0.0       1    26.1
kucouskia*****0002      s   03/04/93   18:21       2       1.1       2     1.4
legares*******0008      s   05/18/93   11:47       2       0.2       2     3.9
leguyen0009             s   01/05/93   18:36       1       0.2       1     0.6
leguyen*******0009      s   02/09/93   18:54       3       0.3       3     0.5
mcintyrec*****0002      s   05/13/93   17:49      18      16.5      30     1.4
metzcherl*****0002      s   05/15/93   13:48      34      22.4      60     2.2
millern*******0001      s   04/26/93   14:47       3       0.7       4     1.9
miriam********0009      s   01/07/93   15:46       1       0.0       1     2.4
moralesm******0005      s   04/13/93   14:27       1       0.1       1     3.5
morrisc*******0001      s   04/06/93   15:20       1       0.1       1     1.9
neale*********0001      s   05/05/93   18:55       1       1.6       1     1.0
nesmithc******0004      s   03/07/93   22:26       1       2.0       1     0.2
nguyenth******0007      s   03/29/93   16:26       1       0.2       1     1.3
nguyent*******0007      s   04/10/93   12:03       1       0.1       1     2.9
perezw********0004      s   05/05/93   08:28       1       0.4       1     2.2
pete**********0009      s   02/10/93   21:04       2       0.1       2     1.3
rodrigueza****0005      s   04/27/93   18:43       1       0.1       1     6.2
smithm********0004      s   04/20/93   10:35       1       0.2       1     1.7
sonl**********0007      s   04/28/93   15:55       1       0.0       1     9.1
sonx**********0007      s   03/11/93   18:56       1       0.0       1     3.1
swisheri******0002      s   05/06/93   19:27      18      10.1      33     3.1
terry*********0009      s   03/02/93   20:20       6       2.7      10     0.4
torresc*******0002      s   05/13/93   20:21      22      50.2      42     1.4
turnerc*******0001      s   03/30/93   15:10       7       3.8      12     1.5
watsona*******0002      s   05/13/93   17:27       9       2.7      11     1.4
williamsk*****0002      s   05/15/93   17:01      10       3.8      18     1.9
words*********0008      s   04/27/93   20:58       1       0.2       1     1.5

Usage averages for group phigmaaa as of 05/19/93:

                      #      Days     Hours      Sessions      CPU

   Students          50        5       3.9             7       4.4

   Multiples

   Authors

   Instructors


   These statistics include only those records which
   have signed on at least once.
```

Record usage for group phigwraa as of 05/19/93: GED WRiting

		Last On	Days	Hours	Sess.	CPU
amiln********00002	s	03/23/93 17:19	1	0.2	1	2.0
ben**********00009	s	11/17/92 14:25	3	3.4	3	0.3
bielawskic***00000	s	04/11/93 10:02	1	0.0	1	6.2
burnetty*****00008	s	05/18/93 21:29	4	5.6	6	0.9
burrisc******00004	s	03/25/93 11:26	2	0.8	2	1.0
chris********00000	s	01/02/93 22:22	1	0.0	1	9.4
chris hopks	s					
cintronl*****00005	s	04/02/93 17:26	1	0.2	2	2.5
cooneym******00008	s	04/08/93 23:40	1	1.5	3	3.3
dave******phi00000	s	10/25/92 18:21	1	0.0	1	1.1
dumpsoni*****00002	s	05/13/93 16:21	5	5.1	6	0.6
enochv*******00008	s	04/26/93 17:22	2	1.5	2	2.0
grayd********00002	s	02/11/93 20:05	1	0.0	1	49.5
holderp******00006	s	05/16/93 19:29	2	1.0	2	1.5
john*********00009	s	04/19/93 11:59	3	0.4	4	3.6
lebrong******00005	s	05/11/93 14:06	1	0.7	1	1.9
lequyen******00009	s	11/23/92 13:28	1	0.0	1	0.8
ludo*********00009	s	02/12/93 21:26	1	0.0	1	1.0
mcintyrec****00002	s	05/06/93 18:02	5	5.1	5	1.8
mcsorleyj****00003	s	03/13/93 19:55	1	0.0	1	5.8
metzcherl****00002	s	05/14/93 21:57	5	3.9	10	3.0
miriam*******00009	s	01/15/93 15:54	1	0.0	1	7.4
oooneym******00008	s	02/27/93 23:13	1	0.5	1	3.2
pastorizad***00005	s	04/19/93 18:18	2	0.0	2	7.5
santom*******00006	s	05/04/93 20:57	1	1.0	2	2.0
terry********00009	s	01/07/93 21:19	1	0.0	1	5.2
torresc******00002	s	02/18/93 19:42	2	1.3	2	0.8
vuongp*******00007	s	04/19/93 19:28	4	2.8	5	1.5
watsona******00002	s	05/05/93 18:59	2	1.4	2	1.5
williamsk****00002	s	03/10/93 19:19	1	0.1	1	2.1
words********00008	s	05/12/93 09:59	8	3.4	9	0.9
wur**********00007	s	05/14/93 18:31	1	3.4	1	0.9
yuy**********00007	s	04/28/93 20:37	1	0.1	1	2.9

Usage averages for group phigwraa as of 05/19/93:

	#	Days	Hours	Sessions	CPU
Students	32	2	1.4	3	4.2
Multiples					
Authors					
Instructors					

These statistics include only those records which have signed on at least once.

Record usage for group phigscaa as of 05/19/93: GED Science

		Last On		Days	Hours	Sess.	CPU
amiln********00002	s	03/04/93	17:57	1	0.1	1	1.2
arroyoc******00008	s	03/21/93	22:36	1	0.2	1	1.2
chris********00000	s	04/20/93	13:23	4	0.2	5	0.9
cintronl*****00005	s	04/02/93	16:51	1	0.1	1	2.6
colonl*******00002	s	03/10/93	18:11	1	0.5	2	1.2
cooneym******00008	s	04/09/93	00:03	1	0.0	1	5.8
corneliusa***00006	s	02/25/93	16:25	1	0.2	1	1.7
dave******phi00000	s	10/25/92	18:22	1	0.0	1	1.6
donna********00009	s	02/11/93	21:35	1	0.3	1	1.0
dumpsonl*****00002	s	02/18/93	17:25	1	0.1	1	0.6
fieldsc******00001	s	04/05/93	20:28	2	2.2	2	0.7
grayd********00002	s	03/10/93	23:55	1	2.4	1	0.5
hoangl*******00007	s	04/16/93	20:04	2	0.1	2	3.0
jennyfer*****00009	s	12/17/92	17:12	1	0.5	1	0.4
johnsone*****00002	s	03/18/93	18:11	1	0.1	1	2.6
johnsonm*****00004	s	04/12/93	01:00	1	0.0	1	3.2
john*********00009	s	03/23/93	20:59	2	1.2	2	1.2
lebrong******00005	s	04/25/93	17:49	1	0.1	1	2.6
lequyen******00009	s	01/10/93	16:47	1	0.7	1	0.3
ludo*********00009	s	04/07/93	10:21	2	0.9	4	1.7
mcintyrec****00002	s	04/10/93	13:13	3	1.3	3	0.7
metzcherl****00002	s	05/10/93	19:21	4	0.1	6	3.4
morgans******00001	s	03/03/93	13:00	1	0.0	1	5.2
nat**********00000	s	04/10/93	08:03	2	0.6	2	1.7
neale********00001	s	05/05/93	19:05	1	0.1	1	3.9
nguyenth*****00007	s	04/08/93	17:11	2	0.1	2	1.1
nguyent******00007	s	04/10/93	11:54	1	0.2	1	1.1
robersong****00001	s	03/01/93	15:23	1	0.0	1	2.1
rodrigueza***00005	s	04/25/93	13:56	1	0.1	1	5.4
sam**********00009	s	11/30/92	13:20	1	0.1	1	0.6
santom*******00006	s	04/24/93	11:06	1	0.1	1	2.8
teagues******00001	s	04/30/93	12:58	1	1.3	1	0.7
vuongp*******00007	s	03/22/93	18:20	1	0.2	1	1.4
watsona******00002	s	03/18/93	19:00	1	0.3	1	1.6
williamsk****00002	s	03/11/93	20:17	1	0.4	1	2.0
words********00008	s	03/28/93	10:36	2	0.8	2	0.8
yuy**********00007	s	02/25/93	20:12	1	0.7	1	0.7

Usage averages for group phigscaa as of 05/19/93:

	#	Days	Hours	Sessions	CPU
Students	37	1	0.4	2	1.9
Multiples					
Authors					
Instructors					

These statistics include only those records which have signed on at least once.

```
Record usage for group phigsoaa as of 05/19/93: GED Soc. Stud.

                                  Last On            Days   Hours    Sess.   CPU
amiln********00002       s   04/15/93  17:31        2       0.2       2    0.5
blakenevm****00004       s   04/29/93  14:35        2       1.3       2    0.6
bobbsf*******00009       s   02/27/93  22:18        1       1.1       2    0.8
burnetty*****00008       s   03/21/93  19:39        1       0.8       1    0.5
burroush*****00006       s   03/13/93  10:01        1       0.0       1   19.7
chris********00008       s   01/29/93  23:05        2       0.0       2    2.8
colonl*******00002       s   04/15/93  10:03        1       4.2       6    1.3
coonevm******00008       s   04/25/93  15:05        1       0.0       1    4.8
dave******phi00000       s   10/25/92  18:24        1       0.0       1    2.1
dumpsonj*****00002       s   05/13/93  16:23        2       0.1       2    3.6
enochv*******00008       s   02/23/93  22:53        1       0.2       1    0.5
fieldsc******00001       s   05/03/93  14:57        2       1.5       2    1.3
gomezr*******00005       s   04/20/93  12:31        3       0.3       3    4.3
gonzalezm****00005       s   05/17/93  20:45        3       0.1       3    3.8
grayd********00002       s   03/14/93  15:12        5       4.3       6    0.7
hoangi*******00007       s   04/16/93  21:19        1       0.0       1   22.0
johnsone*****00002       s   04/29/93  17:24        4       2.0       4    1.0
johnsonm*****00004       s   04/12/93  02:07        1       1.1       1    1.1
legares******00008       s   04/01/93  16:33        1       0.0       1   14.0
ludo*********00009       s   04/07/93  10:54        2       0.8       3    1.8
mcintyrec****00002       s   02/17/93  13:40        2       0.3       2    1.2
mcsorleyj****00003       s   03/26/93  20:28        1       0.0       1    9.9
metzcherl****00002       s   05/08/93  17:18        9       4.7      12    2.7
nat**********00000       s   03/04/93  19:44        1       0.0       1    6.8
nesmithc*****00004       s   04/20/93  09:37        1       0.0       1    8.3
perezw*******00004       s   03/11/93  14:17        1       0.1       1    3.4
pete*********00009       s   02/08/93  16:26        1       0.1       1    2.1
smithm*******00004       s   04/21/93  09:32        2       0.3       2    1.5
sonl*********00007       s   05/05/93  13:21        1       0.5       1    1.6
swisherj*****00002       s   04/18/93  18:22        1       0.1       1    8.3
teagues******00001       s   03/20/93  14:35        2       0.4       2    2.1
torress******00005       s   05/18/93  17:53        1       0.0       1   18.1
turnerc******00001       s   02/17/93  23:06        1       0.2       1    1.4
watsona******00002       s   03/18/93  19:09        1       0.1       1    2.1
williamsk****00002       s   03/18/93  14:47        1       0.1       1    2.8
words********00008       s   03/11/93  11:42        1       2.0       1    0.5


Usage averages for group phigsoaa as of 05/19/93:
----------------------------------------------------------------------
                        #       Days      Hours      Sessions     CPU

     Students          36         2        0.7            2       4.4

     Multiples

     Authors

     Instructors


     These statistics include only those records which
     have signed on at least once.
```

BEST COPY AVAILABLE

Record usage for group phibsmaa as of 05/19/93: B.S. MAth

		Last On		Days	Hours	Sess.	CPU
amiln********00002	s	05/06/93	19:25	13	1.9	20	0.4
anita********00009	s	01/28/93	20:44	2	2.1	2	0.0
ben**********00009	s	11/21/92	16:07	4	1.8	5	0.3
blakenevm****00004	s	05/13/93	11:08	9	3.4	15	1.4
bob elmore***00000	s	04/29/93	14:22	2	0.0	2	2.1
burnetty*****00008	s	04/23/93	21:45	3	2.4	4	3.0
cainep*******00004	s	02/25/93	10:43	1	0.0	1	9.3
chrish*******00000	s	01/18/93	10:39	1	0.0	2	3.9
chris********00000	s	03/24/93	22:55	5	0.3	16	1.9
cockrellt****00006	s	03/03/93	12:50	1	0.1	1	2.8
colonl*******00002	s	03/30/93	18:38	10	2.7	26	1.6
corneliusa***00006	s	02/20/93	18:48	2	0.4	2	1.1
dave*********00000	s	01/15/93	15:44	1	0.0	1	5.2
davish*******00004	s	03/05/93	14:51	2	0.2	2	1.5
dumpsonj*****00002	s	04/01/93	17:23	3	1.1	3	0.7
ferris*******00009	s	03/09/93	11:25	1	0.0	1	4.1
fieldsc******00001	s	03/31/93	22:00	3	2.4	3	1.2
fisherl******00004	s	05/18/93	11:15	5	1.0	6	2.5
fosterl******00004	s	05/11/93	11:02	2	0.2	3	3.0
gail*********00009	s	01/11/93	12:49	1	0.0	1	2.5
grayd********00002	s	05/04/93	18:34	3	0.2	3	0.7
jennyfer*****00009	s	12/04/92	11:30	1	0.1	1	1.4
johnsone*****00002	s	03/04/93	18:25	6	1.9	9	0.8
johnsonm*****00004	s	04/12/93	00:57	3	1.7	4	1.7
john*********00009	s	05/19/93	10:12	10	1.7	14	1.0
kucouskia****00002	s	02/11/93	19:31	1	1.0	1	1.2
leguyen00009	s	12/29/92	19:12	1	0.1	1	0.6
leguyen******00009	s	12/29/92	18:46	3	0.5	3	0.4
lewisd*******00006	s	02/23/93	18:05	1	0.2	2	1.4
mary*********00009	s	12/14/92	14:13	1	0.3	1	0.8
mcintyrec****00002	s	03/25/93	13:15	6	1.5	9	0.5
mcsorleyj****00003	s	04/25/93	16:32	2	0.1	2	4.0
metzcherl****00002	s	05/15/93	13:00	16	15.8	33	2.5
millern******00001	s	02/21/93	12:03	1	1.0	1	0.2
miriam*******00009	s	03/16/93	15:07	4	0.8	4	0.4
morgans******00001	s	03/03/93	12:58	1	0.0	1	8.1
nat**********00000	s	05/14/93	09:21	12	0.9	14	2.8
nesmithc*****00004	s	05/13/93	13:19	6	1.7	7	1.2
ooneym*******00008	s	02/27/93	22:38	1	0.1	2	3.1
perezw*******00004	s	05/12/93	15:29	9	1.9	16	1.7
perkinsl*****00004	s	03/09/93	11:42	3	1.2	4	1.2
pete*********00009	s	02/08/93	16:28	1	0.0	1	5.2
robersong****00001	s	03/01/93	15:40	2	0.2	2	2.2
sam**********00009	s	03/29/93	16:41	2	0.7	2	0.9
sanderss*****00008	s	03/10/93	18:30	1	0.1	1	2.1
swisherj*****00002	s	03/28/93	20:17	8	2.8	9	1.6
terry********00009	s	01/25/93	18:04	2	0.2	2	0.4
testing00009	s	01/18/93	09:50	1	0.0	1	5.9
testing******00009	s	01/18/93	09:48	1	0.1	2	1.0
torresc******00002	s	02/25/93	20:36	7	6.8	7	1.6
turnerc******00001	s	02/28/93	20:30	8	5.0	24	1.5
vuongty******00007	s	04/14/93	19:42	2	0.6	2	2.1
watsona******00002	s	05/13/93	18:08	6	3.9	7	1.2
williamsk****00002	s	04/02/93	20:40	7	2.6	27	2.1

Usage averages for group phibsmaa as of 05/19/93:

	#	Days	Hours	Sessions	CPU
Students	54	4	1.4	6	2.1
Multiples					
Authors					
Instructors					

These statistics include only those records which have signed on at least once.

BEST COPY AVAILABLE

Record usage for group phibsgaa as of 05/19/93: B.S. Grammar

		Last On		Days	Hours	Sess.	CPU
amiln********00002	s	05/06/93	21:32	13	10.3	20	1.7
ben**********00009	s	02/15/93	15:48	2	0.9	2	2.6
bielawskic***00008	s	05/16/93	20:14	10	17.1	19	2.6
blakeneym****00004	s	04/25/93	08:51	1	0.6	1	0.6
bob elmore***00000	s	04/08/93	16:18	1	2.9	2	0.2
brownr*******00001	s	02/16/93	18:25	1	0.4	1	0.5
burnettv*****00008	s	05/18/93	20:49	17	22.2	35	1.6
burrisc******00004	s	04/23/93	20:10	1	0.1	1	4.0
byrdm********00008	s	04/03/93	10:29	4	3.0	4	2.3
chris*****phi00000	s	10/22/92	14:29	1	0.0	1	0.8
chris********00000	s	01/29/93	23:04	2	0.0	2	2.2
cooneym******00008	s	04/08/93	19:33	5	4.2	11	4.2
corneliusa***00006	s	02/17/93	12:41	1	0.7	1	0.9
dave******phi00000	s	10/25/92	18:08	1	0.0	1	0.5
dave runtephi00000	s	10/22/92	17:14	1	0.0	1	3.4
donna********00009	s	04/19/93	19:30	13	2.8	18	3.2
dumpsonj*****00002	s	05/13/93	16:03	6	4.4	6	1.1
enochv*******00008	s	04/29/93	22:52	1	0.2	1	6.2
fieldsc******00001	s	04/21/93	16:07	5	7.1	5	3.3
fred*********00009	s	01/20/93	18:00	2	0.3	2	1.4
freemanc*****00008	s	04/27/93	01:02	2	1.9	4	6.0
freemanc*****00008	s	03/29/93	20:03	3	0.3	3	1.7
grayd********fam	s	05/10/93	22:32	2	1.0	2	4.5
grayd********00002	s	05/13/93	18:16	14	17.5	16	2.4
gwup*********00007	s	05/06/93	10:36	2	3.1	2	2.3
hoangj*******00007	s	05/13/93	19:31	2	2.1	4	1.6
hoangl*******00007	s	05/06/93	19:32	2	2.9	10	2.9
holderp******00006	s	04/28/93	16:27	1	0.6	1	4.7
johnsone*****00002	s	04/15/93	17:15	3	0.2	4	2.8
johnsonm*****00004	s	04/12/93	00:54	4	3.1	5	1.4
john*********00009	s	04/05/93	08:47	5	1.2	7	2.4
kucouskia****00002	s	03/04/93	19:07	1	0.8	1	3.2
legares******00008	s	05/19/93	00:32	25	25.3	39	2.5
lequyen******00009	s	04/07/93	15:42	5	0.7	5	1.3
ludo*********00009	s	02/12/93	21:51	1	0.0	1	2.2
mcintyrec****00002	s	05/06/93	17:10	4	2.2	7	2.0
mcsorleyj****00003	s	05/18/93	17:56	25	37.3	52	1.9
metzcherl****00002	s	05/02/93	18:11	9	4.4	12	2.8
millern******00001	s	04/06/93	20:30	1	0.2	2	4.0
miriam*******00009	s	01/18/93	09:34	1	0.0	1	8.4
morgans******00001	s	03/02/93	11:04	1	0.3	1	2.5
nat**********00000	s	03/19/93	05:50	1	0.2	1	3.9
neale********00001	s	05/05/93	17:13	1	0.1	1	1.8
nguyenth*****00007	s	03/30/93	18:09	2	0.3	3	2.7
nguyent******00007	s	04/06/93	18:48	1	0.1	1	3.6
oooneym******00008	s	02/27/93	03:20	4	2.4	7	3.0
parkere******00003	s	05/06/93	21:05	1	0.0	1	6.1
perezw*******00004	s	03/16/93	15:45	1	0.1	1	1.0
sammonsm*****00006	s	03/16/93	09:35	1	0.1	1	1.8
sam**********00009	s	05/03/93	17:18	5	3.6	5	3.0
sanderss*****00008	s	05/17/93	20:57	13	12.5	21	3.2
santom*******00006	s	05/10/93	18:44	1	0.0	1	6.3
sonl*********00007	s	05/10/93	17:00	6	7.3	8	3.0
sonx*********00007	s	03/12/93	14:23	1	0.1	1	3.5
swisherj*****00002	s	05/13/93	18:33	15	6.7	32	3.2
terry********00009	s	03/02/93	20:17	2	0.3	2	4.4
thallerh*****00003	s	03/01/93	20:34	2	0.4	2	2.0
torresc******00002	s	03/11/93	19:10	1	0.0	1	4.1
torrest******00008	s	02/27/93	09:59	1	0.3	2	1.8
turnerc******00001	s	03/01/93	11:22	3	0.3	3	2.5
vuongp*******00007	s	04/15/93	19:30	2	1.4	2	1.3
vuongtc******00007	s	03/29/93	15:32	1	0.3	1	1.4
vuongty******00007	s	05/13/93	17:58	8	5.8	14	3.9
watsona******00002	s	05/12/93	18:57	3	2.3	3	2.4
words********00008	s	04/20/93	08:57	12	7.5	20	2.0
wur**********00007	s	05/14/93	14:43	1	0.2	3	5.2
yuy**********00007	s	04/28/93	20:32	4	0.6	5	2.9

```
Usage averages for group phibsgaa as of 05/19/93:
                           #     Days     Hours     Sessions    CPU
     Students             67        4       3.6            7    2.8
     Multiples
     Authors
     Instructors


     These statistics include only those records which
     have signed on at least once.




                          BACK to return
```

Record usage for group phibsraa as of 05/19/93: B.S. Reading

		Last On	Days	Hours	Sess.	CPU
anita********00009	s	04/19/93 22:38	3	0.9	3	2.9
arroyoc******00008	s	03/21/93 15:20	1	0.3	1	1.9
ben**********00009	s	12/03/92 13:05	3	1.2	3	0.2
bibbsh*******00006	s	04/20/93 13:23	1	0.9	2	1.8
buit*********00007	s	03/26/93 14:32	2	0.6	3	1.2
burnettv*****00008	s	03/22/93 21:46	7	5.1	13	1.3
burrisc******00004	s	04/23/93 20:44	3	3.2	8	0.7
burroush*****00006	s	02/23/93 12:56	2	0.3	2	0.6
chris********00000	s	04/20/93 13:23	4	0.2	5	1.1
collinst*****00003	s	04/05/93 17:03	1	0.1	1	3.9
davish*******00004	s	03/25/93 10:18	4	1.8	7	1.6
enochv*******00008	s	04/27/93 19:04	8	7.9	12	2.2
fisherl******00004	s	04/20/93 11:39	1	0.1	1	4.8
fred*********00009	s	03/17/93 15:04	1	0.3	1	3.3
freemanc*****00008	s	04/27/93 00:11	1	0.1	1	4.5
grayd********00002	s	02/11/93 20:07	1	0.0	1	30.5
hoangi*******00007	s	04/19/93 15:30	3	0.1	5	3.3
jennyfer*****00009	s	12/17/92 22:22	1	0.5	1	0.7
johnsone*****00002	s	02/14/93 18:56	1	0.1	1	1.4
johnsonm*****00004	s	03/31/93 23:45	1	2.1	2	1.2
john*********00009	s	05/05/93 08:59	5	1.6	8	1.9
lebrong******00005	s	04/22/93 18:05	1	0.2	1	2.3
legares******00008	s	03/24/93 15:53	1	0.0	1	20.5
leguyen******00009	s	12/29/92 18:40	2	0.7	4	0.7
ludo*********00009	s	11/25/92 15:51	1	0.0	1	5.6
mcintyrec****00002	s	04/27/93 19:08	1	0.0	1	5.3
mcsorleyj****00003	s	05/09/93 20:56	44	97.5	63	1.2
metzcherl****00002	s	04/08/93 09:24	4	2.1	4	3.1
miriam*******00009	s	12/04/92 11:15	4	0.7	4	0.7
nesmithc*****00004	s	05/11/93 14:08	7	2.4	7	1.0
nguyenth*****00007	s	03/26/93 15:26	1	0.1	1	2.6
pedro********00009	s	11/23/92 14:58	1	0.1	1	0.5
perezw*******00004	s	03/11/93 13:10	1	0.1	1	2.3
perkinsl*****00004	s	05/11/93 11:36	4	1.6	4	0.8
rodrigueza***00005	s	04/27/93 18:37	1	0.1	1	6.6
rosa*********00009	s	11/24/92 15:44	1	0.4	1	0.3
sam**********00009	s	03/28/93 11:17	3	1.7	3	1.0
santom*******00006	s	04/23/93 19:58	2	2.3	7	2.4
stevensonc***00003	s	04/15/93 17:44	1	0.1	1	2.5
swisherj*****00002	s	02/08/93 16:45	1	0.1	1	1.1
terry********00009	s	11/27/92 14:05	1	2.9	1	0.8
thallerh*****00003	s	03/09/93 21:17	2	0.6	3	1.0
theressa*****00009	s	04/30/93 17:00	2	0.1	2	3.9
williamsk****00002	s	03/18/93 14:06	1	0.0	1	25.5
words********00008	s	05/19/93 10:08	12	9.5	17	1.9
yuy**********00007	s	02/25/93 21:00	1	0.8	2	1.6

Usage averages for group phibsraa as of 05/19/93:

	#	Days	Hours	Sessions	CPU
Students	46	3	3.3	5	3.6
Multiples					
Authors					
Instructors					

These statistics include only those records which have signed on at least once.

```
Curriculum/Group: 2gedread/phigreaa            5/19/93   10:18 A
                                               ------ Current ------
   Student                       Class  VMS   Course Module Status
   arroyoc*****00008              8      1      1      C
   ben*********00009              1      1
   bibbsh******00006              6      1
   burnettv****00008              8      1
   burrisc*****00004              4      1
   byrdm*******00008              8      1
   chris*******00000              9      1      2      K
   colonl******00002              2      1
   dangt*******00007              7      1
   davish******00004              4      1
   dumpsonj****00002              2      1      1      A
   enochv******00008              8      1      1      C
   fieldsc*****00001              1      1
   freemenc****00008              8      1      1      B
   grayd*******00002              2      1
   gwup********00007              7      1
   hoangi******00007              7      1      1      G
   holderp*****00006              6      1
   johnsone****00002              2      1
   johnsonm****00004              4      1
   lebrong*****00005              5      1
   legares*****00008              8      1
   lequyen*****00009              9      1      1      H
   mcintyrec***00002              2      1
   mcsorleyj***00003              3      1      2      G
   metzcherl***00002              2      1
   miriam******00009              9      1
   nesmithc****00004              4      1
   parkere*****00003              3      1
   pastorizad***00005             5      1
   rosao00009                     1      1      1      C
   santom******00006              6      1
   testing*****00009              9      1      1      B
   torresc*****00002              2      1
   torress*****00005              5      1      1      G
   turnerc*****00001              1      1
   vuongp******00007              7      1
   vuongtc*****00007              7      1
   vuongtv*****00007              7      1
   watsona*****00002              2      1
 * williamsk***00002              2      1
   words*******00008              8      1      2      A
   yuy*********00007              7      1

 ✓ = curriculum mastered                           * = not started
   NEXT for more students           LAB for listing options

 Enter student name for individual records >
```

GED Reading = PHIGREAA

```
Curriculum/Group: 2gedmath/phigmaaa              5/19/93   10:16 AM
                                                 ———— Current ————
  Student                        Class   VMS   Course Module Status
  ———————————————————————————————————————————————————————————————————
  amiln********00002               2      1      1      D
  bielawskic***00008               8      1      1      A
  blakeneym****00004               4      1
  burroush*****00006               6      1
  chrish*******00000               9      1
  chris********00000               9      1
  cockrellt****00006               6      1
  colonl*******00002               2      1      1      F
* dave******phi00000               0      0
  dave*********00000               9      1
* dave runtephi00000               0      0
  davish*******00004               4      1
  dumpsonj*****00002               2      1      1      A
  ferris*******00009               9      1
  fieldsc******00001               1      1
  fisherl******00004               4      1
  grayd********00002               2      1      2      C
* gwup*********00007               7      1
  hoangi*******00007               7      1
  hoangl*******00007               7      1
  holderp******00006               6      1
  johnsone*****00002               2      1
  john*********00009               9      1
  kucouskia****00002               2      1      1      A
  legares******00008               8      1
  lequyen00009                     9      1
  lequyen******00009               9      1
  mcintyrec****00002               2      1      1      F
  metzcherl****00002               2      1      1      C
  millern******00001               1      1      1      A
  miriam*******00009               9      1
  moralesm*****00005               5      1
  morrisc******00001               1      1
  neale********00001               1      1      1      A
  nesmithc*****00004               4      1
  nguyenth*****00007               7      1
  nguyent******00007               7      1
  perezw*******00004               4      1
  pete*********00009               9      1
  rodrigueza***00005               5      1
  smithm*******00004               4      1
  sonl*********00007               7      1
* sonx*********00007               7      1
  swisherj*****00002               2      1      2      G
  terry********00009               1      1      1      B
  torresc******00002               2      1      5      E
  turnerc******00001               1      1      1      C
  watsona******00002               2      1      2      A
  williamsk****00002               2      1      1      A
  words********00008               8      1

———————————————————————————————————————————————————————————————————
 ✓ = curriculum mastered                          * = not started
———————————————————————————————————————————————————————————————————
  NEXT for more students        LAB for listing options

Enter student name for individual records »
```

GED Math = PHIGMAAA

```
Curriculum/Group: 2gedwrite/phigwraa          5/19/93   10:20 AM
                                              ——————— Current ———————
  Student                       Class  VMS   Course Module Status
  amiln********00002              2     1
  ben**********00009              1     1      1      A
  bielawskic***00008              8     1
  burnettv*****00008              8     1      1      B
  burrisc******00004              4     1
  chris********00000              9     1
* chris hopks                     1     1
  cintronl*****00005              5     1
  cooneym******00008              8     1      1      F
  dave******phi00000              1     1
  dumpsonj*****00002              2     1      1      C
  enochv*******00008              8     1      1      C
* grayd********00002              2     1
  holderp******00006              6     1      1      B
  john*********00009              9     1      1      D
  lebrong******00005              5     1      1      B
  lequyen******00009              1     1
  ludo*********00009              9     1
  mcintyrec****00002              2     1      2      D
  mcsorleyj****00003              3     1
  metzcherl****00002              2     1      1      F
  miriam*******00009              9     1
  oooneym******00008              8     1      1      C
  pastorizad***00005              5     1
  santom*******00006              6     1      1      C
  terry********00009              9     1
  torresc******00002              2     1      1      C
  vuongp*******00007              7     1      1      B
  watsona******00002              2     1      1      E
  williamsk****00002              2     1
  words********00008              8     1      1      B
  wur**********00007              7     1      1      B
  yuy**********00007              7     1

  ✓ = curriculum mastered
  NEXT for more students          LAB for listing options

Enter student name for individual records »
```

GED Writing = PHIGWRAA

```
Curriculum/Group: 2gedsci/phigscaa              5/19/93   10:21 AM
                                           ———— Current ————
Student                     Class   VMS   Course Module Status
   amiln********00002         2      1
   arroyoc******00008         8      1
   chris********00000         9      1      2       A
   cintronl*****00005         5      1
   colonl*******00002         2      1      1       A
   cooneym******00008         8      1
   corneliusa***00006         6      1
   dave******phi00000         1      1
   donna********00009         9      1      4       A
   dumpsonj*****00002         2      1
   fieldsc******00001         1      1      1       A
   grayd********00002         2      1      1       A
   hoangi*******00007         7      1
   jennyfer*****00009         9      1
   johnsone*****00002         2      1
   johnsonm*****00004         4      1
   john*********00009         9      1      1       A
   lebrong******00005         5      1
   lequyen******00009         9      1      1       A
   ludo*********00009         9      1      4       A
   mcintyrec****00002         2      1      1       A
   metzcherl****00002         2      1
   morgans******00001         1      1
   nat**********00000         9      1      1       A
   neale********00001         1      1
   nguyenth*****00007         7      1
   nguyent******00007         7      1
   robersong****00001         1      1
   rodrigueza***00005         5      1
   sam**********00009         9      1
   santom*******00006         6      1
   teagues******00001         1      1
   vuongp*******00007         7      1
   watsona******00002         2      1
   williamsk****00002         2      1
   words********00008         8      1      2       A
   yuy**********00007         7      1

 ✓ = curriculum mastered
   NEXT for more students          LAB for listing options

Enter student name for individual records >
```

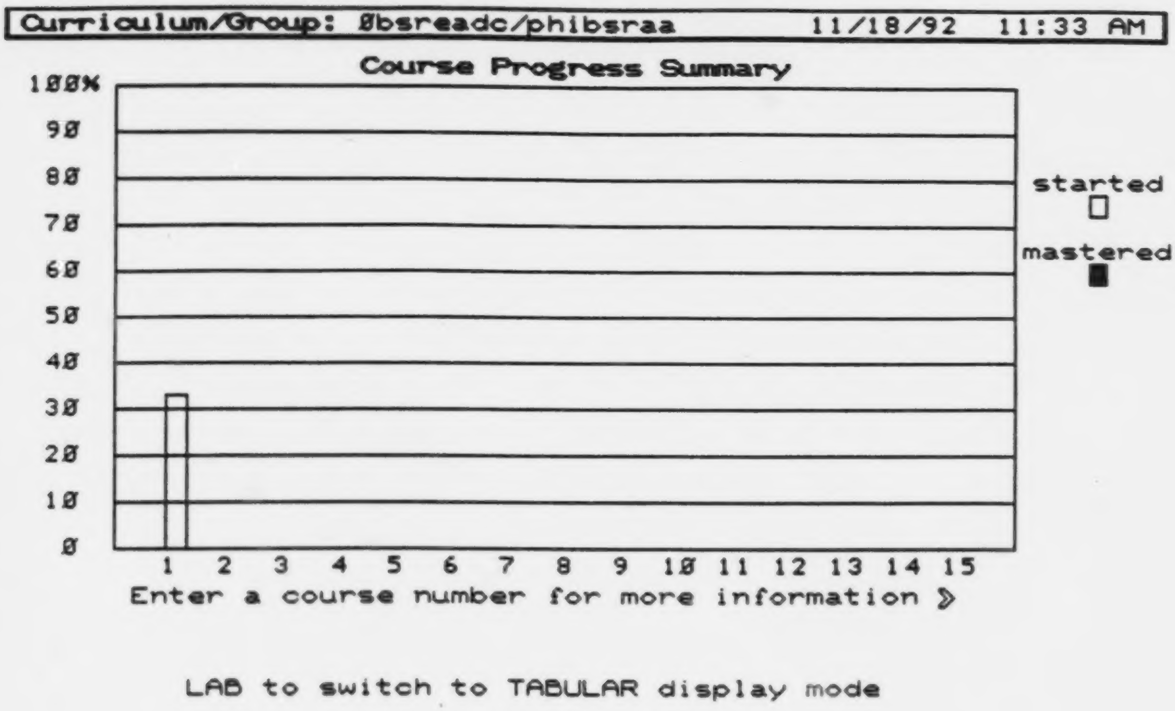
GED Science = PHIGSCAA

```
Curriculum/Group: 2gedsoc/phigsoaa               5/19/93   10:23 AM
                                                   ------ Current ------
  Student                    Class   VMS    Course Module Status
  amiln********00002           2      1
  blakeneym****00004           4      1
  bobbsf*******00009           9      1       1      A
  burnettv*****00008           8      1
  burroush*****00006           6      1
  chris********00000           9      1
  colonl*******00002           2      1       1      B
  cooneym******00008           8      1
  dave******phi00000           1      1
  dumpsonj*****00002           2      1
  enochv*******00008           8      1
  fieldsc******00001           1      1       1      E
  gomezr*******00005           5      1
  gonzalezm****00005           5      1
  grayd********00002           2      1       1      B
* hoangi*******00007           7      1
  johnsone*****00002           2      1       1      B
  johnsonm*****00004           4      1
  legares******00008           8      1
  ludo*********00009           9      1       1      C
  mcintyrec****00002           2      1       1      A
  mcsorleyj****00003           3      1
  metzcherl****00002           2      1       1      A
  nat**********00000           9      1
  nesmithc*****00004           4      1
  perezw*******00004           4      1
  pete*********00009           9      1
  smithm*******00004           4      1
  sonl*********00007           7      1
  swisherj*****00002           2      1
  teagues******00001           1      1
* torress******00005           5      1
  turnerc******00001           1      1
  watsona******00002           2      1
  williamsk****00002           2      1
  words********00008           8      1
 ✓ = curriculum mastered                           * = not started
  NEXT for more students            LAB for listing options

Enter student name for individual records »
```

GED Soc. Stud. = PHIG SOAA

```
Curriculum/Group: 0bsreadc/phibsraa                 5/19/93   10:00 AM
                                                  ——— Current ———
   Student                      Class   VMS   Course Module Status
   anita********00009             9      1
   arroyoc******00008             8      1
   ben**********00009             1      1
   bibbsh*******00006             6      1
   buit*********00007             7      1
   burnettv*****00008             8      1      3       F
   burrisc******00004             4      1
   burroush*****00006             6      1
   chris********00000             9      1
   collinst*****00003             3      1
   davish*******00004             4      1      1       G
   enochv*******00008             8      1      3       B
   fisherl******00004             4      1
   fred*********00009             9      1
   freemanc*****00008             8      1
 * grayd********00002             2      1
   hoangi*******00007             7      1
   jennyfer*****00009             9      1

   johnsone*****00002             2      1
   johnsonm*****00004             4      1      1       F
   john*********00009             9      1      2       K
   lebrong******00005             5      1
 * legares******00008             8      1
   lequyen******00009             1      1
   ludo*********00009             1      1
   mcintyrec****00002             2      1
 ✓ mcsorleyj****00003             3      1      9       T
   metzcherl****00002             2      1      1       G
   miriam*******00009             1      1      1       A
   nesmithc*****00004             4      1      1       F
   nguyenth*****00007             7      1
   pedro********00009             1      1
   perezw*******00004             4      1
   perkinsl*****00004             4      1      1       A
   rodrigueza***00005             5      1
   rosa*********00009             1      1

   sam**********00009             9      1
   santom*******00006             6      1      1       J
   stevensonc***00003             3      1
   swisherj*****00002             2      1
   terry********00009             1      1      5       U
   thallerh*****00003             3      1
   theressa*****00009             9      1
 * williamsk****00002             2      1
   words********00008             8      1      1       O    running
   yuy**********00007             7      1

 ✓ = curriculum mastered                              * = not started
   NEXT for more students            LAB for listing options

 Enter student name for individual records »
```

Basic Skills Reading = PHIBSRAA



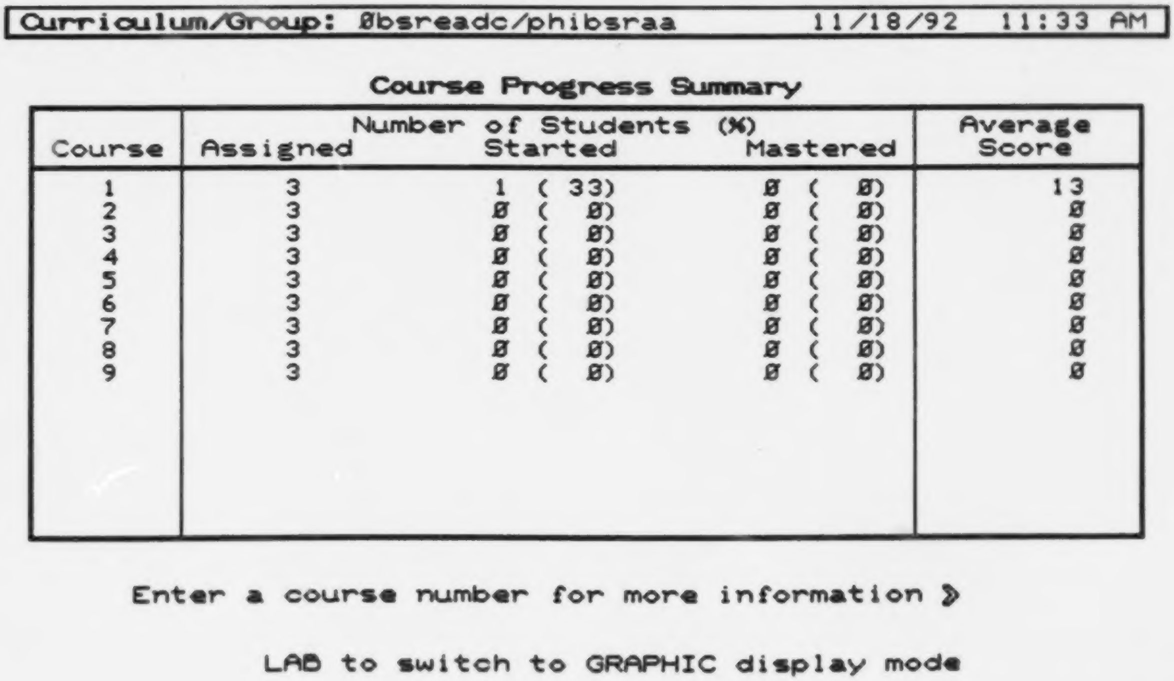
Curriculum/Group: 0bsreadc/phibsraa 11/18/92 11:33 AM

Course Progress Summary

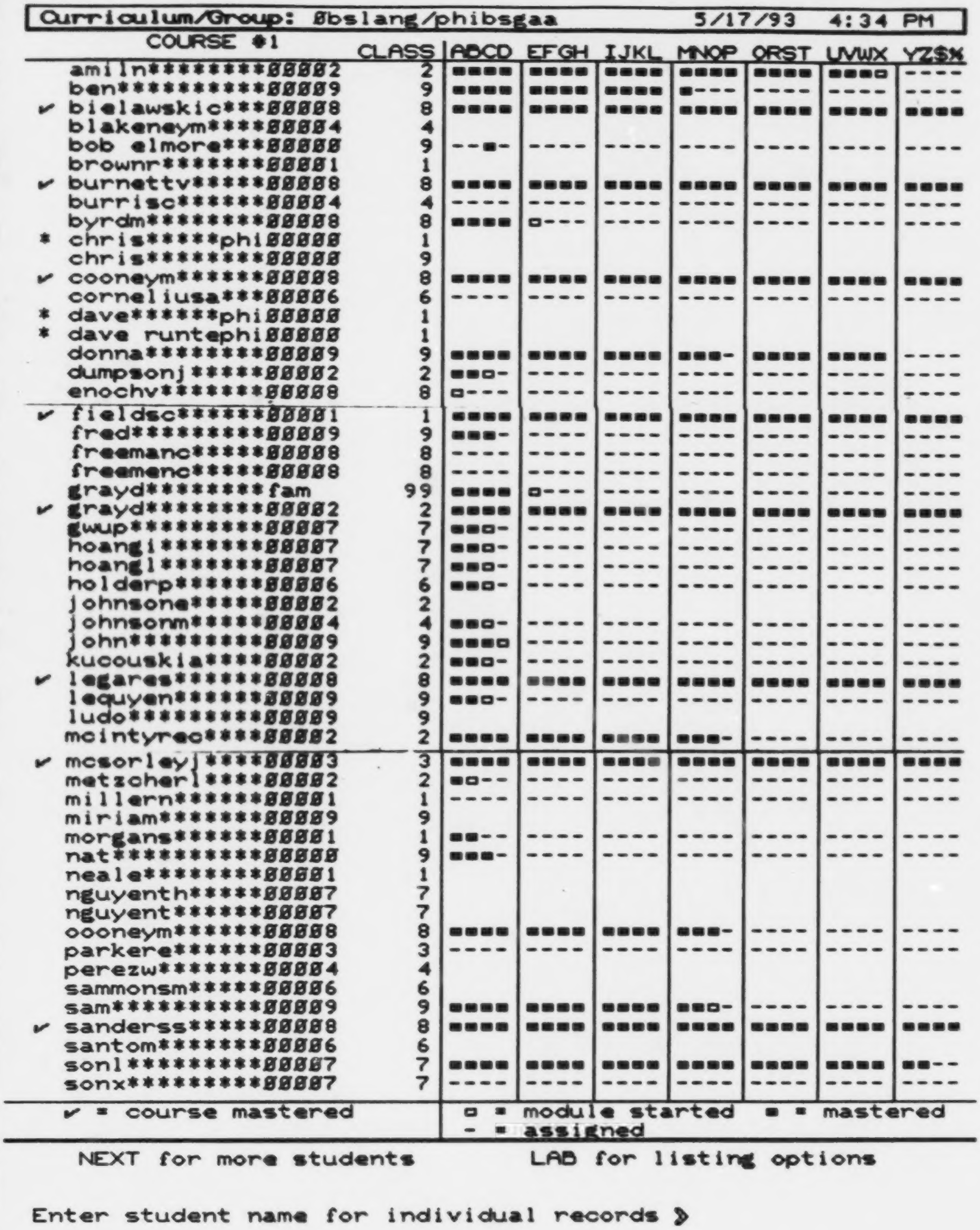
100%
90
80
70
60
50
40
30
20
10
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
started ☐
mastered ■

Enter a course number for more information »

LAB to switch to TABULAR display mode



```
Curriculum/Group: 0bsreadc/phibsraa          11/18/92  11:33 AM

                    Course Progress Summary

         |        Number of Students (%)              | Average
 Course  | Assigned       Started         Mastered    |  Score
    1    |    3          1 (  33)         0 (   0)    |    13
    2    |    3          0 (   0)         0 (   0)    |     0
    3    |    3          0 (   0)         0 (   0)    |     0
    4    |    3          0 (   0)         0 (   0)    |     0
    5    |    3          0 (   0)         0 (   0)    |     0
    6    |    3          0 (   0)         0 (   0)    |     0
    7    |    3          0 (   0)         0 (   0)    |     0
    8    |    3          0 (   0)         0 (   0)    |     0
    9    |    3          0 (   0)         0 (   0)    |     0

      Enter a course number for more information »

             LAB to switch to GRAPHIC display mode
```



```
| Curriculum/Group: 0bslang/phibsgaa                5/17/93   4:34 PM |
          COURSE #1
                                CLASS|ABCD  EFGH  IJKL  MNOP  QRST  UVWX  YZ$%
     amiln*********00002         2  |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■□ |----
     ben**********00009          9  |■■■■ |■■■■ |■■■■ |■--- |---- |---- |----
   ✓ bielawskic***00008          8  |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■
     blakeneym****00004          4  |     |     |     |     |     |     |
     bob elmore***00000          9  |--■- |---- |---- |---- |---- |---- |----
     brownr*******00001          1  |     |     |     |     |     |     |
   ✓ burnettv*****00008          8  |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■
     burrisc******00004          4  |---- |---- |---- |---- |---- |---- |----
     byrdm********00008          8  |■■■■ |□--- |---- |---- |---- |---- |----
   * chris*****phi00000          1  |     |     |     |     |     |     |
     chris********00000          9  |     |     |     |     |     |     |
   ✓ cooneym******00008          8  |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■
     corneliusa***00006          6  |---- |---- |---- |---- |---- |---- |----
   * dave******phi00000          1  |     |     |     |     |     |     |
   * dave runtephi00000          1  |     |     |     |     |     |     |
     donna********00009          9  |■■■■ |■■■■ |■■■■ |■■■- |■■■■ |■■■■ |----
     dumpsonj*****00002          2  |■■□- |---- |---- |---- |---- |---- |----
     enochv*******00008          8  |□--- |---- |---- |---- |---- |---- |----
   ✓ fieldsc******00001          1  |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■
     fred*********00009          9  |■■■- |---- |---- |---- |---- |---- |----
     freemanc*****00008          8  |---- |---- |---- |---- |---- |---- |----
     freemenc*****00008          8  |---- |---- |---- |---- |---- |---- |----
     grayd********fam           99  |■■■■ |□--- |---- |---- |---- |---- |----
   ✓ grayd********00002          2  |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■
     gwup*********00007          7  |■■□- |---- |---- |---- |---- |---- |----
     hoangi*******00007          7  |■■□- |---- |---- |---- |---- |---- |----
     hoangl*******00007          7  |■■□- |---- |---- |---- |---- |---- |----
     holderp******00006          6  |■■□- |---- |---- |---- |---- |---- |----
     johnsone*****00002          2  |     |     |     |     |     |     |
     johnsonm*****00004          4  |■■□- |---- |---- |---- |---- |---- |----
     john*********00009          9  |■■■□ |---- |---- |---- |---- |---- |----
     kucouskia****00002          2  |■■□- |---- |---- |---- |---- |---- |----
   ✓ legares******00008          8  |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■
     lequyen******00009          9  |■■□- |---- |---- |---- |---- |---- |----
     ludo*********00009          9  |     |     |     |     |     |     |
     mcintyrec****00002          2  |■■■■ |■■■■ |■■■■ |■■■- |---- |---- |----
   ✓ mcsorleyj****00003          3  |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■
     metzcherl****00002          2  |■□-- |---- |---- |---- |---- |---- |----
     millern******00001          1  |---- |---- |---- |---- |---- |---- |----
     miriam*******00009          9  |     |     |     |     |     |     |
     morgans******00001          1  |■■-- |---- |---- |---- |---- |---- |----
     nat**********00000          9  |■■■- |---- |---- |---- |---- |---- |----
     neale********00001          1  |     |     |     |     |     |     |
     nguyenth*****00007          7  |     |     |     |     |     |     |
     nguyent******00007          7  |     |     |     |     |     |     |
     oooneym******00008          8  |■■■■ |■■■■ |■■■■ |■■■- |---- |---- |----
     parkere******00003          3  |---- |---- |---- |---- |---- |---- |----
     perezw*******00004          4  |     |     |     |     |     |     |
     sammonsm*****00006          6  |     |     |     |     |     |     |
     sam**********00009          9  |■■■■ |■■■■ |■■■■ |■■□- |---- |---- |----
   ✓ sanderss*****00008          8  |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■
     santom*******00006          6  |     |     |     |     |     |     |
     sonl*********00007          7  |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■■■ |■■--
     sonx*********00007          7  |---- |---- |---- |---- |---- |---- |----
   ✓ = course mastered              |  □ = module started    ■ = mastered
                                    |  - = assigned

     NEXT for more students               LAB for listing options

   Enter student name for individual records ❯
```

USAGES OF CYBIS SYSTEM

(Drexel) Record usage for group phi00001 as of 08/13/93:

Name		Last On	Days	Sessions
brownr	i	02/16/93 18:26	3	6
fieldsc	i	05/03/93 13:36	17	29
kellettb	i	04/06/93 10:21	1	1
millern	i	04/26/93 15:03	5	20
morgans	i	05/26/93 14:18	5	12
morrisc	i	05/06/93 09:30	2	3
neale	i	05/24/93 14:38	4	8
robersong	i	03/01/93 15:29	2	8
teagues	i	04/30/93 11:39	3	9
turnerc	i	03/30/93 15:11	12	61

(Lutheran Settlement House) Record usage for group phi00002 as of 08/13/93:

Name		Last On	Days	Sessions
amiln	i	07/22/93 22:05	35	124
colonl	i	05/11/93 17:43	23	88
dumpsonj	i	05/13/93 16:23	19	64
grayd	i	07/24/93 23:13	44	113
johnsone	i	05/30/93 19:15	25	87
kucouskia	i	03/25/93 17:54	6	11
mcintyrec	i	05/26/93 09:51	31	105
metzcherl	i	08/11/93 13:59	76	373
swisherj	i	06/19/93 12:57	35	132
torresc	i	07/18/93 14:56	33	100
watsona	i	06/03/93 17:20	17	50
williamsk	i	05/15/93 16:53	15	75

(YMCA) **Record usage for group phi00003 as of 08/13/93:**

Name		Last On	Days	Sessions
collinst	i	04/07/93 08:44	3	10
crawleyf	i			
garrp	i	03/11/93 12:40	1	2
goreh	i	05/03/93 11:25	1	1
masonj	i			
mcintoshj	i			
mcsorleyj	i	08/12/93 21:04	96	311
orsinij	i	04/01/93 18:51	3	8
parkere	i	06/03/93 20:45	10	32
stevensonc	i	04/15/93 17:46	1	4
thallerh	i	03/11/93 12:11	4	9
thallerj	i			

(Center for Literacy) **Record usage for group phi00004 as of 08/13/93:**

Name		Last On	Days	Sessions
blakeneym	i	06/07/93 20:08	15	44
burrisc	i	05/29/93 22:39	14	35
cainep	i	02/25/93 10:43	1	2
davish	i	03/25/93 10:18	8	23
fisherl	i	05/18/93 11:15	8	16
fosterl	i	05/11/93 11:03	4	8
grantj	i	08/11/93 19:50	9	22
johnsonm	i	04/12/93 01:00	7	23
millerc	i	07/21/93 17:36	7	16
nesmithc	i	05/26/93 14:51	15	32
perezw	i	07/23/93 18:00	21	67
perkinsl	i	05/18/93 11:31	8	15
smithm	i	05/20/93 23:04	8	16
youngj	i			

(Aspira) **Record usage for group phi00005 as of 08/13/93:**

Name		Last On	Days	Sessions
agnesm	i			
cintronl	i	08/09/93 12:16	50	129
deliap	i	08/06/93 21:17	30	109
gomezr	i	07/29/93 22:22	24	73
gonzalezm	i	07/22/93 19:45	28	84
handelm	i	06/21/93 19:17	7	25
lebrong	i	08/10/93 14:57	37	120
moralesm	i	05/24/93 16:26	17	42
pastorizad	i	05/21/93 18:22	22	121
perezj	i	07/29/93 17:35	33	127
rodrigueza	i	08/08/93 19:05	38	93
rosarioj	i	07/22/93 20:47	25	97
santiagom	i			
torress	i	07/01/93 14:24	18	63

(Temple) **Record usage for group phi00006 as of 08/13/93:**

Name		Last On	Days	Sessions
bibbsh	i	06/02/93 18:29	3	8
burroush	i	04/25/93 08:38	12	44
cockrellt	i	05/21/93 09:07	4	9
corneliusa	i	03/19/93 15:06	15	35
figueroamad	i	06/16/93 21:49	7	15
holderp	i	05/31/93 13:01	24	58
lewisd	i	04/06/93 12:21	5	10
nelsond	i	06/04/93 15:46	13	30
rossj	i	04/06/93 12:47	2	5
sammonsm	i	04/08/93 11:37	3	6
santom	i	06/17/93 22:19	12	30
tamas	s			

(Indochinese-American Council) Record usage for group phi00007, 08/13/93:

Name		Last On	Days	Sessions
buit	i	03/26/93 14:50	3	10
gwup	i	05/06/93 13:56	4	12
hoangi	i	06/16/93 21:52	20	54
hoangl	i	06/10/93 17:52	8	21
nguyent	i	04/16/93 17:02	8	25
nguyenth	i	06/03/93 19:24	19	45
phanl	i	04/06/93 18:33	1	1
sonl	i	06/24/93 19:27	20	44
sonx	i	03/12/93 14:20	3	7
thuyt	i	06/24/93 10:53	4	6
vuongp	i	08/06/93 19:14	24	48
vuongtc	i	03/31/93 16:05	2	4
vuongtv	i	06/10/93 16:47	23	43
wur	i	05/14/93 18:32	1	8
yuy	i	07/18/93 17:35	17	45

(CWEP) Record usage for group phi00008 as of 08/13/93:

Name		Last On	Days	Sessions
bielawskic	i	06/23/93 10:20	36	97
burnettv	i	07/22/93 11:06	36	137
byrdm	i	05/04/93 17:45	17	26
chybinskij	i	08/08/93 22:42	9	21
cooneym	i	05/25/93 18:50	15	51
enochv	i	08/10/93 10:31	26	66
freemanc	i	05/23/93 22:41	12	24
johnsonn	i	06/21/93 18:37	1	2
legares	i	06/28/93 12:22	48	197
sanderss	i	05/26/93 20:35	16	40
words	i	07/27/93 16:20	64	201

(Instructors-as-learners) Record usage for group phi00009 as of 08/13/93:

Name		Last On	Days	Sessions
agnesm	i			
anita	i	04/19/93 22:38	4	8
ben	i	07/15/93 16:48	24	72
bob	i	11/17/92 15:20	1	3
bobbsf	i	02/27/93 21:42	1	2
donna	i	07/26/93 19:05	23	49
donnac	i	06/04/93 11:07	1	2
don hoffstrom	i	01/15/93 15:29	1	1
ferris	i	03/16/93 09:29	7	15
fred	i	04/12/93 14:17	8	13
jay	i			
jeane	i			
jennyfer	i	12/27/92 19:36	4	13
john	i	06/16/93 17:42	33	99
kuttan	i			
lequyen	i	06/23/93 13:41	27	77
ludo	i	05/04/93 09:39	12	28
mary	i	05/25/93 10:22	11	22
meg	i	11/24/92 13:23	1	1
mell	i	03/29/93 14:31	1	1
mhecksel	i	07/21/93 15:52	1	13
miriam	i	07/21/93 13:59	1	2
neida	i			
nick	i	12/18/92 13:29	1	1
pat	i			
pedro	i	04/15/93 18:09	11	
pete	i	02/10/93 21:07	3	
rosa	i	11/24/92 16:01	1	
testing	i	01/18/93 09:52	1	

(Instructors-As Instructors_ Record usage for group phiadmin as of 08/13/93:

		Last On	Days	Sess.
agnesm	i			
anita	i	04/26/93 08:42	3	4
ben	i	08/13/93 08:03	122	351
bob elmore	a	11/17/92 15:09	1	1
chris hopkins	a	01/11/93 10:49	2	2
dave runte	a	06/22/93 11:01	2	2
dean christensen	a	a 02/11/93 09:32	2	2
donna	i	08/10/93 14:28	62	110
donnac	i	06/15/93 16:37	15	23
ferris	i	03/16/93 09:40	5	6
fred	i	07/07/93 09:12	24	32
hong	i	06/23/93 17:38	36	61
jan	i			
jay	i	05/14/93 14:43	1	1
jean	i	11/30/92 14:13	1	1
jennyfer	i	01/29/93 12:46	8	10
john	i	06/22/93 07:56	57	96
lequyen	i	02/25/93 09:58	14	22
ludo	i	05/04/93 09:49	16	20
meg	i	06/11/93 11:34	2	3
mell	i	04/20/93 20:23	2	2
miriam hecksel	a	07/21/93 14:00	75	109
pat	i			
pedro	i	07/26/93 19:12	119	318
pete	i	06/01/93 11:55	7	9